

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

#### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

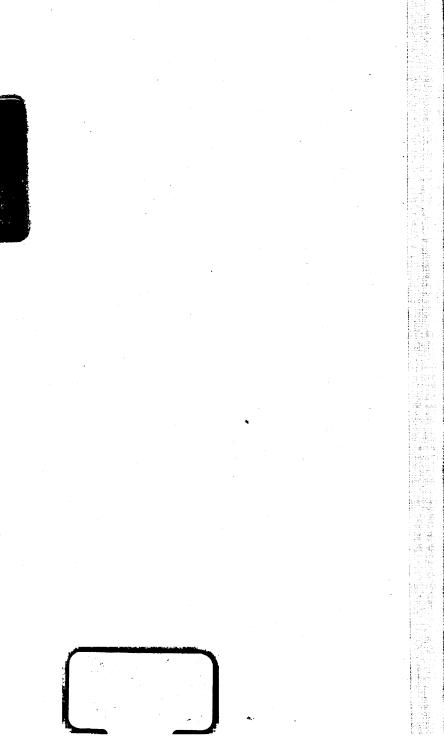
We also ask that you:

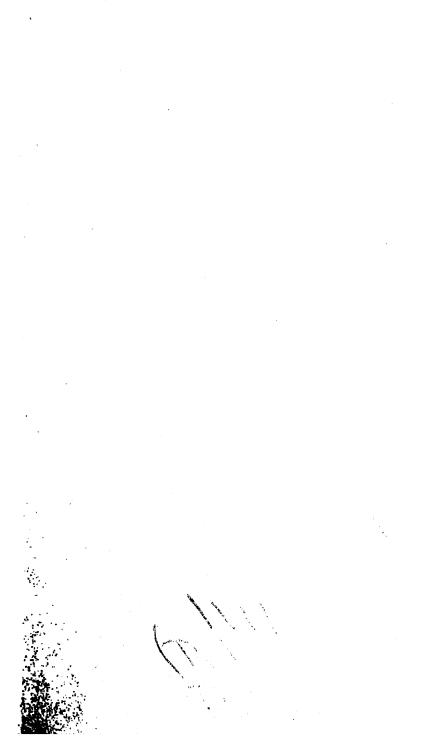
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

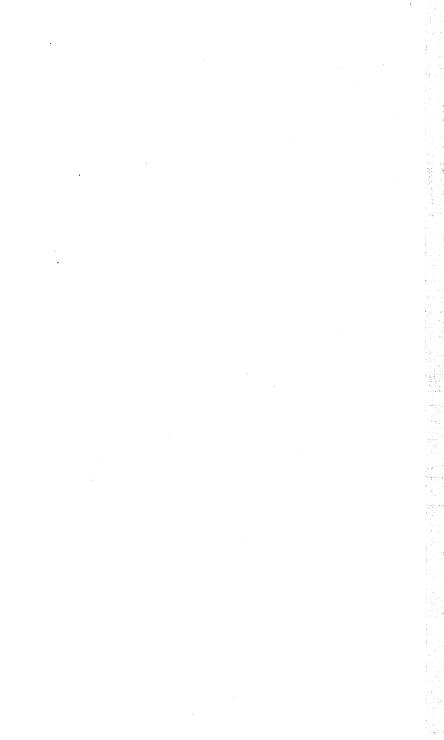
#### **About Google Book Search**

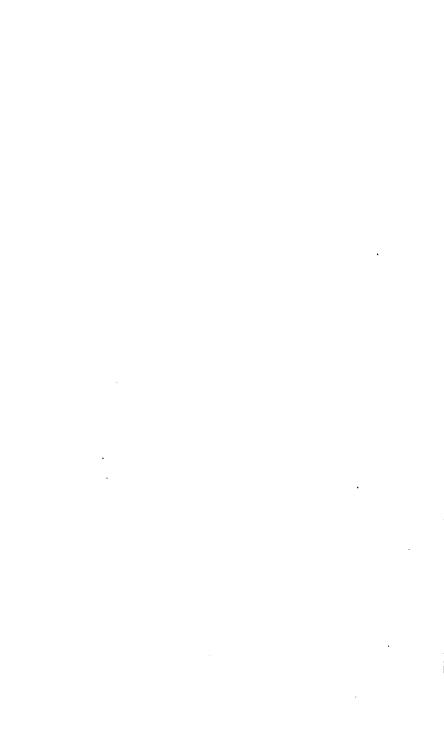
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

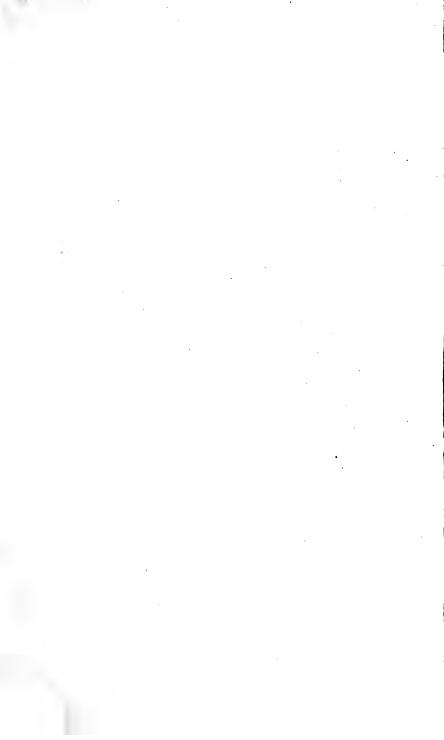
3 3433 08182147 6



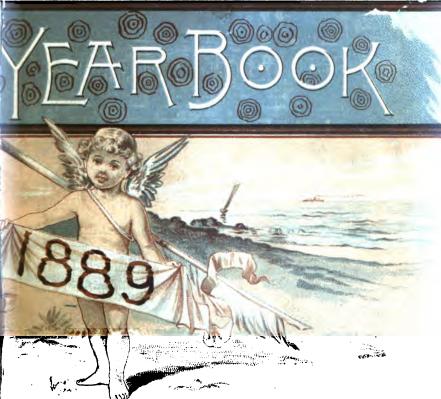












PRICE 25 CENTS-BY MAIL POST PAID 30 CENTS

# DETROIT 2 JOURNAL

*** 18								9	9	•	*	44	**	** -:-	*	18	35	î	7	*
JANUARY.									J	JL	Y.			JANUARY.						
6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26	7 14 21 28	1 8 15 22 29	29 16 23 30	3 10 17 24 31	11 18 25	5 12 19 26	20	5 12 19 26	6 13 20 27	7 14 21 28	22	2 9 16 23 30	10 17 24	18
	FE	BI	20	AR	Y.			1	u	GU	SI		-	-	FE	BI	รป	AR	Y.	
B	21	T	w	T	F	8	8_	М	T	w	T	P	8	8	M	T	w	T	F	8
3 10 17 94	111111111111111111111111111111111111111	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22	9 10 23	11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	8 15 22 29	9 16 23 30	10 17 24	2 9 16 23	3 10 17 24	18	19		21	1 8 15 22
		M.	R	сH		-	-	SE	PT	EN	18	ER		-	-	M	AR	СН		7
8	M	T	W	T	9	н	8	M	T	W	T	F	8	В	M	T	w	т	r	В
3 10 17 24 31	11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	1 8 15 22 29	9 16 23 30	3 10 17 24	11 18 25	12 19 26	6 13 20 27	7 14 21 28	2 9 16 93 30	3 10 17 24 31	11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	15 22 29
	_		R		_			_	_	O		_		APRIL.						
7 14 21 28	1 8 15 22 29	9 16 23 30	3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	8 6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24	4 11 18 25	5 12 19 26
	_	T	A				NOVEMBER.					MAY.								
5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	23	3 10 17 24 31	8 11 18 25	3 10 17 24	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	9 16 23 30	9 10 17 24 31
		_	N	E.			_	_	_	M	_	R.				J	JN	E.		
29630	3 10 17 24	4 11 18 25		6 13 20 27	7 14 21 28	11 8 15 22 29	22	9 16 23 30	3 10 17 24 31	W 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	8 15 22 29	9 16 23 30	3 10 17 24	w 4 11 18 25	5 12 19 26	6 18 20 27	7 14 21 29

THE From Publisher,

# Detroit, Journal

# YEAR-BOOK

FOR 1889.

No. 1.



PUBLISHED BY

The Detroit Journal Company,

DETROIT, MICHIGAN.

Copyrighted, 1888, by the Detroit Journal Company.

# Index.

The second secon	D	D
GENERAL. Page	PAGE	PAGE
Actors and Actresses,	Interest Laws, 53	Street-lighting in London. 62
stage names 33	Internal Revenue Taxes. 18	Sub-treasuries. U. S 76
Age, to find a person's 61	Inventions, Famous 48	Sunday-school lessons for
Almone on and your books 11	Fifteen American 73	1889
Almanaes and year-books 11	Languagea European 34	Normal class-work 65
Animals, ages of 40	Languages, European. 34 Large Things, Some. 39 Law, General Banking. 90	Statistics30
Army, Generals of U.S. 76 The Continental	Large Thugs, Some	C SUBLIBUICS
The Continental 79	Law. General Banking. 90	Superstitions about cures. 40
Art terms in 56	Michigan Liquor 28	Territory, comparative 61
Artillery Ancient and	Laws, Some Michigan 89	Times, standard and local. 12
Art, terms in	Laws, Some Michigan 89 Legal Information 52	Territory, comparative 61 Times, standard and local. 12 Tour round the World 85
Automor Ingred programs	Lagislatura Michigan 81	Trees, ages of
Autumn leaves, preserv-	Legislature, Michigan 81 Libel Laws, Digest of 116	United States 60
ing	Tibel Laws, lugest of 10	Voloniile 94
ing	Liberty, Bartholdi's Statue 50	Wolapuk
Belle Isle105	Libraries, Largest 62	Volaptik
Belle Isle	In U. S 80	wars of the U.S
Birds, care of	Licenses in Detroit101	Water, to purify drinking 63 Weather prophecy 13, 35 Weather, to keep well in
Rody weights of the 87	Liquor Legislation 22	Weather prophecy 13, 35
Paralmana pointage 97	Law, Michigan 28	Weather, to keep well in
Business pointers	Literary Names, Fictitious 32	cold: BX
Calendar, astronomical 3	Maries Figure 90	Wadding calabrations 95
Monthly	Marriage Laws 20	Week to find dom of 1 10
The 11	Mayors of Detroit101	week, to find day of 13
	Measurements, Handy 35	Wedding celebrations 35 Week, to find day of 12 Weights and measures 43
Canale 87 91	Measures, Weights and 43	Wisdom, words, of 67 Witticisms.51, 53, 66, 67, 68, 73
Casino Tabernacle118	Metals, The	Witticisms.51, 53, 66, 67, 68, 73
Canals	Michigan	Wonders, American 78
Catechism, the Femiliane, bo	Military Officers, State 82	
Charities, public in De-	Million and Dillion 98	Words Bryant's List of
troit 104	Million and Billion         35           Ministers, U.S.         72           Mints of U.S.         76	Words, Bryant's List of Forbidden 42
Cities, population of for-	Ministers, U.S	Tono
eign 20	Mints of U. S	_Long
American 76, 117	Money, Facts about 28	Writers in London 88
Civil Service System 19	Money, Facts about 28 Musical Societies in De-	Zodiac, Signs of the 12
Coal, in one ton of 87	troit101	ADVERTISEMENTS.
Color and Colors 56	Nationalities in U.S 80	Accident Insurance134
Color and Colors 50	Naturalization	Accident Insurance134 Adv't Rates, Journal's145
Compasses, two natural. 46	Navies of Europe 61	American Writing Machine
Composition, rates paid .116 Corgress. U. S	Newspapers in U.S 77	Co The 190
Corgress. U. S 09	Nicknames, American 78	Co., The
Constitutional amend-	Nicknames, American 78	Art Loan and the Journal 140
ment, new 90	Nobility, English 34	Arthur & Philbric 149
Conundrums51, 53, 68	Nobility, English 34 Passport Regulations 15	Brearley 8 Systematizer103
Convergat Law	Patent, How to get a	Brown, wm 185
Countries statistics of 29	Petroleum, Uses of 57	Buhl, Walter & Co 119, 121
Countries, statistics of 29 Death-roll of the year110	Petroleum, Uses of 57 Phonograph Improved 60	Brearley's Systematizer. 163 Brown. Wm
Debts of foreign nations, 60	Plants, Care of 54 Points of Interest in De-	Detroit and Clev'l'd Steam
Discoveries, the great 47	Points of Interest in De-	
Divorce laws 21	troit 104, 105	Detroit Savings Bank157
Drinks of all nations 22	troit	Detroit Savings Bank157 F. & P. M. R. R153
Devokand's expectancy	Population Density of 37, 78	Florida Information Bu-
Drunkard's expectancy	American Cities 76	reau, The125 Gamble & Partridge181 Home Life Ius. Co., The161
of life	And Taxation 80	Gamble & Partridge131
Ears, care of the of	States and Territories. 75	Home Life Ins. Co., The., 161
Earth, the	Postal information 14	
Elections, Presidential 73	Postal Information,	Improved Church Plans 169
Elections, Presidential 73 Popular vote 73 Michigan83, 86 Detroit and Wayne Co 102	Post-offices of Michigan . 92	Toguelan H D & Co. 195
Michigan83, 86	Poultry, care of 54	Tables T TT
Detroit and Wayne Co 102	Presidents and Vice-Presi-	Lesner, J. H
Relectricity uses of	dents 74	Improved Church Plans. 163 Josselyn. H. R. & Co
Etiquette in a nutshell 44	Wealth of 74	
Etiquette in a nutshell 44 Eyes, care of the 51 Facts, sundry 36, 51, 59, 61	dents	(inside back cover.) Michigan Central R. R155 Milburn & Williamson161
Facts sundry 36, 51 59 61	Press Associations115	Michigan Central R. R155
Fish and game laws 26	Railroad runs 35	Milburn & Williamson161
Till and game laws 20	Railroad runs	Mutual Acc't Ass'n. The 185
Flower clock 59	Statistics of	Mutual Life Ins. Co
Flowers that sleep 48	Statistics of	Mutual Reserve Fund Life
Food, strengths of 48	Record of the year 106	Association 150
Game laws 26 Games for the household, 55	Religions of the World 50	Association 159 Newsboys' Base Ball Club.142
Games for the household, 55	Remedies, some simple, 50	Newsboys Base Ball Cido.142
Came notions about 41	River, the Detroit101	New York Life Ins. Co158
Geography, Michigan . 85, 88 Gipsies, origin of	Religions of the World 30 Remedies, some simple, 50 River, the Detroit 101 Sailing distances on lakes. 91	Patterson, David143 People's Savings Bank157 Plank's Grand Hotel164
Ginsies, origin of 37	Saints of the Church 49 Sault Ste Marie Canal. 37, 91	People's Savings Bank157
Government, the Federal, 69	Sault Ste Marie Canal. 37, 91	Plank's Grand Hotel104
The State 81	Schools and Saloons 80	Preston National Bank125
	Science, paradoxes of 48	Price. John B149
Detroit City 98 Curiosities of 75	Seals, Federal and State 77	Questions to be answered.122
Grafting wax	Secret Societies in U.S 80	Questions to be answered.122 Richmond & Harris128
	Sight foods for the 63	
	Sick, foods for the 63 Signal Service, U. S 18	Journal
Hack fares in Detroit 101	Signal Service, U. S 18	Chinman O W 141
Heat, effects of 61 Hints to a young trades-	Signals, Railroad and	Chipman, U. W
Hints to a young trades-	Steamer	Smith, Mr. H. D150
man	Slang, some origins of 42	Siege of Knoxville157
Historic names and titles. 31	Spelling reform 61	Singer M'fg. Co., The161 Swail, W. H149 The Journal Not An "Or-
Household hints	Spelling reform	Swail, W. H149
Tumon Life facts of 60 67	State institutions 87	The Journal Not An "Or-
Till and the Tacks of of or	States area and popula-	gan"144
Household hints	tion area and popular	gan "
Ink, indelible 37	tion	Van Leven & Co189

# Detroit Journal Year-Book,

#### FOR THE YEAR 1889.

#### ASTRONOMICAL CALENDAR.

The year 1889 comprises to July 8, inclusive, the latter part of the 118th year of American Independence, and thereafter the former part of the 114th. It corresponds more or less closely to—

The year 6603 of the Julian Period.

The year 7897-98 of the Byzantine Era.

The year 5649-50 of the Jewish Era, the year 5650 beginning at sunset September 26.

The year of the World (Useher's chronology) 5893; in the Septuagint chronology, 7897-98.

The year 2665 of the Olympiads, or the fourth year of the 667th Olympiad, commencing in July, 1889.

The year 2642 since the foundation of Rome.

The year 2636 of the Era of Nabonassar.

The year 2549 of the Japanese 1 ra.

The year 2201 of the Era of the Seleucidæ.

The year 1605 of the Era of Diocletian.

The year 1306-7 of the Mohammedan Era, or Era of the Hegira.

The year 218 of the Dionysian Period.

#### OTHER CHRONOLOGICAL CYCLES.

Lunar Cycle, or wolden Number9 Solar Cycle	Roman Indiction
Solar Cycle	Dominical Letter F

#### THE SEASONS (DETROIT TIME).

Winter Solstice	Winter l	egins	December	r 21,	4	o'clock	P. M.	
Vernal Equinox	Spring	"	March	20,	5	**	A. M.	
Summer Solstice	Summer		June	21,	2	**	A. M.	i
Autumnal Equinox	Autumn	44-	Septembe	r 22,	4	44	P. M.	ł
Winter Solstice	Winter	**	December	28,	10	46	A. M.	ŀ

#### MORNING STARS.

MERCURY, Feb. 14 to April 25, June 19 to agust 7, and October 15 to December 7.
France, April 30 to end of year.

#### EVENING STARS.

MERCURY, until Feb. 14, from April 25 to June 19, August 7 to October 15, and December 7 to end of year. VENUS, until April 30.

#### PLANETS REIGHTEST OR BEST SEEN.

MERCUEY, January 30, after sunset; March 13, before sunrise; May 24, after sunset; July 12, before sunrise; September 20, after sunset; October 31, before sunrise, Venus, March 25 and June 5. Mars, not this year. Jupiter, June 24. Saturn, February 5. Uranus, April 9. Neptune, November 25.

#### LEGAL HOLIDAYS IN MICHIGAN, 1889.

Tuesday, January 1—New Year's Day.
Friday, February 22—Washington's Birthday.
Thursday, May 30—Decoration Day.
Thursday, July 4—Independence Day.
Thursday, November 28—Thanksgiving Day.
Wednesday, December 25—Christmas Day.

#### FIXED AND MOVABLE FESTIVALS, Etc., 1889.

Epiphany Jan Septuagesima Sunday Feb. Quinquagesima—Shrove Sunday Mar. Ash Wednesday	17 3 6	Trinity Sunday	uņe	9 16 20
First Sunday in Lent	10 17 25 14	St. John's Day	" ept. ec.	. 29
Good Friday.  Easter Sunday Low Sunday Rogation Sunday.  May	28	EMBER DAYS.  March13, 15, 16. Sept18, June12, 14, 15. Dec18,	20, 20,	21. 21.

#### ECLIPSES FOR 1889.

There will be five Eclipses this year—three of the Sun, two of them total; and two of the Moon, both of them partial.

I. A TOTAL ECLIPSE OF THE SUN, on Tuesday, January 1. It will be visible in most parts of North America and the North Pacific Ocean, being total along a track 80 miles wide, extending from the Aleutian Islands and running centrally through Point Arena, California, Winnemucca, Nevada, Mountain Meadows, Idaho, and terminating about Lake-Winnipeg. Elsewhere it will be partial, and will be invisible east of a line drawn through. New York City and Ogdensburgh. On the longitude of Detroit the eclipse will begin at 3:52 P. M., and end after sunset; five digits will be eclipsed. On the longitude of Grand. Haven, Mich., it will begin at 3:33 P. M., continuing until after sunset, and seven digits-will be eclipsed.

II. A Partial Eclipse of the Moon, on Wednesday and Thursday, January 16 and 17. It will be visible in all parts of the world, except in Asia and Australia. At Detroit the Moon enters penumbra at 9:05 P. M., enters shadow 10:26, middle of eclipse 11:57, Moon leaves shadow at 1:29 A. M., and penumbra at 2:50. At Grand Haven these times will be, respectively, 8:52, 10:13, 11:44, 1:16, and 2:37.

III. AN ANNULAR ECLIPSE OF THE SUN, on Friday, June 28, invisible in any part of America; visible as a partial eclipse generally in South Africa and in Asia and the western part of Australia. The centual and annular eclipse can be seen only in South Africa and parts of the South Atlantic and Indian Oceans.

IV. A PARTIAL ECLIPSE OF THE MOON, on Friday, July 12, invisible in the United States; visible generally in Europe, Asia, Africa, Australia, the Atlantic Ocean, and the eastern portion of South America.

V. A TOTAL ECLIPSE OF THE SUN, on Sunday, December 22, invisible in the United States. For a few minutes after sunrise a small portion of the end of the eclipse may be seen in Nova Scotia, Cape Hatteras, and Southern Florida. The total eclipse can only be seen in South Africa, the northern part of the South Atlantic Ocean, and along the northern east coast of South America.

### First Month.

#### **JANUARY, 1889.**

31 Days.

		For Michigan.		igan.	PHASES OF THE MOON. D. H. M.
- 4			1		New Moon
**	7	ي ا	1.	أنعا	First Quarter
. 8	کو ∵	<u> </u>	3	1 2 2	Full Moon 17 0 58 mor.
32	33	독근	15 8	8.5	Third Quarter
Day of Month.	Day of Week.	Œ	Stin sets.	Moon rises.	Third Quarter 24 11 13 " New Moon 31 4 26 "
_	$\overline{}$	H M	H M	H M	
1 2 8 4	Şa S	7 30	4 39	7 7	New Year's Day. Great fire in Detroit, 1886. Detr't P.O. estab., 1808
.2	S	7 30	4 40	sets	First State Legis, met in Detroit, 1837. J.S. Newberry, Det. died. 1887.
- 8				6 54	
-4	Tu	7 30	4 42	8 5	Albion College burned, 1844. Gov Mason died, Detroit 1843
5	We	7 30	4 43	9 18	End of Grierson's raid through Mississippi
6	Th	7 29	4 44	10 19	End of Grierson's raid through Mississippi. 1865 Charles Sumner born, 1811. Missolonghi taken by Turks. 1823 Gen. Putnam b., 1718. Fenslon d., 1715. Bank of N. A. opened, 1782 Galileo died, 1642. Battle of New Orleans. 1815
7	Fr	7 29	4 45	11 22	Gen. Putnam b., 1718. Fenelon d., 1715. Bank of N. A. opened, 1782
ğ	Sa	7 29	4 40	mor	Galileo died, 1642. Battle of New Orleans
5 6 7 8 9 10 11	135	1 20	4 47	1 0 23	Judge witheren died, Detroit, 1838. Napoleon III. died 1878
ŤΩ	Mo	7 28	4 40	1 23	
11	Tu	7 20	4 49	2 22	Michigan Territory erected, 1805. Alexander Hamilton born, 1757
	We	7 20	4 50	3 21	National Fast in U. S., 1815. S. P. Chase born
	Th Fr	7 21	4 01	4 19	Schuyler Colfax died in Minnesota
	Sa.	7 00	4 50	5 16 6 10	Canad'n patriots evacuate Navy Isl'd, 1838. Calif'nia gold found, 1848
18	Oa C	7 98	4 54	7 10	Macomb county erected, 1818. Stanton becomes Sec. of War, 1862 Gen. Hazen died, 1887. Dr. Leavitt died
17	MA.	7 95	4 55	7 1 rises 6 28 7 33	Renjamin Franklin horn
īá	Th	7 25	4 52	6 28	Benjamin Franklin born
์าลั	WA	7 24	4 58	7 33	Georgia seceded, 1861. Battle of Mill Springs Ky. 1969.
				8 38	Robert Morris born, 1788. Jules Favre died 1890
21	Fr	7 23	5 '0	9 44	Louis XVI, beheaded, 1793. Gen. Fitz John Porter cashiered, 1868.
22	Sa.	7 22	5 2	10 51	Americans defeated at Frenchtown, 1818. Earthquake in Detr't, 1812
28	F S MO	7 22	5 8	mor	Massacre of the Raisin 1818. Steamer Pacific lost 1856. Dorá d 1869.
24	Мo	7 21	5 4	0 0	Series of earthquakes in Detroit 1811 Frederick the Greet h 1719
25	Tu	7 20	5 5	1 11	Series of earthquakes in Detroit, 1811. Frederick the Great b.1712 Robert Burns born, 1759. St. Louis Castle, Quebec, burned1831
26	we	7 19	10 7	1 11 2 28	Michigan formally admitted to the Union
26 27	Th	7 18	IK 8	9 85	Rurr's conspiracy 1907
28	Fr	7 17	5 9	4 45	Prescott died, 1859. Capitulation of Paris to the Germans1871
29	Sa	7 16	5 11	5 50	George III. died, 1820. Timothy Pickering died
80	S	7 15	5 12	4 45 5 50 6 47 7 85	Eruption of Mt. Vesuvius, 1868. Charles I. beheaded 1649
श्र	Mo	7 14	5 13	7 85	Vaccination discovered, 1798. Rev. A. D. Mayo born 1823

#### Second Month.

#### FEBRUARY, 1889.

28 Days.

	Ι.	For	Mic	chi	gan.	PHASES OF THE MOON, D. H. M.
* #	늦성	Sun rises.	1	-1		
2.5	72	_ 3		3	걸캷	First Quarter 8 4 2 eve.
32	312	3.5	133	28	<u> </u>	Full Moon
A	Α	200	ďΩ		2	Last Quarter 22 0 09
	_	H M	H	M	H M	
1 2 8 4	Fri	7 14	5 1	4	6 54	Citizens banished from Detroit by Proctor 1818
2	Set	7 13	5 1	51.	8 1	Michigan Legislature resolved lovalty and aid to Union 1861
- 8	3	7 11	5 1	6	9 8 0 11	Michigan Central R. R. opened to Ypsilanti1888
-4	Mo	7 10	5 1	8 1	0 11	Election to first Michigan Constitutional Convention1885
5 6 7	Tu	7 9	5 1	9 1	1 12	Earthquake Pointe & Pitre, 1834. Battle of Hatcher's Run1865
5	We	7 8	5 2	וועג	mor	
. 7	Th	7 7	5 2	2	0 12	Earthquake in Detroit, 1812. Gen. Sherman in Detroit1868
		7 6	5 2	3	1 10	
78	Sat	7 4	5 2	6	2 8 8 6	Trucker of Poris size of 1709 Occar Wishers of Trucker of Poris size of 1709
40	S Mo	7 2	0 2	70	4 0	Treaty of Paris signed, 1763. Queen Victoria married 1840
10	Tu	7 1			4 51	
		ż ô	5 8	ñ	5 89	Capt. Cook killed at Sandwich Islands, 1779. Com'd're Hull d. 1843
					6 32	ST. VALENTINE'S DAY. Sheridan occupied Meridian, Miss1864
าร์	Ρ'n	6 57	5 8	Ŕ	ises	French Assembly first met after Second Empire 1871
īĕ	Sat	6 55	5 8	4	6 29	Fort Donelson surrendered, 1862. Russia an Empire1727
17	8	6 54	5 8	5	7 36	SEPTUAGESIMA SUNDAY. John B. Gough died
18	Mo	6 52	5 3	6	8 48	Charleston occupied by Federal troops 1865
145 167 189 192 222 233 245 245 245 245 245 245 245 245 245 245	Tn	6 51	5 8	13	9 51	Florida ceded by Spain to U.S. 1991
20	₩e	6 50	58	19	1 2	James I. of Scotland murdered, 1437. Battle of Olustee, Fla., 1864
21	Th	6 48	5 4	11 1	mor	Moravians settle near Mt. Clemens, Mich 1789
.22	Fri	6 47	5 4	2	0 13	Washington's Birthday, 1732. French revolution breaks out 1848
38	Sat	6 45	5 4	3	1.23	Battle of Buena Vista, 1847. J. Q. Adams died
<b>X</b> 2	9	6 43	5 1	10	2 83	City charter of Detroit revoked, 1809. Robert Fulton died1815
30	五〇	0 42	5 4	10	8 38	
30	111	0 40	5 4	7	4 86	
- 21	T 6	D 52	3 4	D	5 27 6 8	
. 48	LE .	0 50	0 4	Ψ.	U 8	Design memoponism ronce established by State Regislature1090

#### MARCH, 1889.

. 31 Days.

		ForM	lich	igan.	PHASES OF THE MOON. D. H. M.	
Day of Month.	Day of Week.	Sun , rises.	sets.	Moon sets.	New Moon.       1       5       17 eve.         First Quarter.       9       1       15 morn.         Full Moon.       17       7       3 eve.         Last Quarter       24       2       24 morn.         New Moon.       31       6       53 eve.	1
5678901234567890123456789	TUWE THE SAME THE SAM	5 52 6 5 50 6 5 49 6 5 47 6 5 45 6	51 52 58 54 56 78 10 11 12 13 14 15 16 17 18 20 21 22 22 24	sets 6 7 51 55 57 8 5 5 5 6 5 5 5 6 5 5 5 5 6 5 5 5 5 5 5	QUINDUAGRSIMA (SHROVE) SUNDAY. Terr. gov't reorganized INAUGURATION DAY. HON. Edw. Breitung died MARDI GRAS (SEROVE TUESDAY). Cadillac, founder of Detroit, I ASH WEDNESDAY Eclipse of the sun, 1897. Strike on Gould r'y. Florida admitted, 1844. Commodore Stockton died Cadillac, returning from France, arrives at Quebec State capital located at Lansing, 1847. Mrs. Barbauld died FIRST SUNDAY IN LENT. Dan'l Boone Indian captive at Detroit Great storm on Atlantic coast, 1888. Tasso born. Gen. Grant com'r-in-chief, 1864. First Gen'l Assembly in Pa. Snow blockade on Eastern railroads, 1888. Alaska bought Farragut runs his fleet past Port Hudson, 1863. A. Jackson b Detroit House of Correction established, 1861. Maine admitted State capital removed to Lanning, 1847. James Madison born ST. PATRICK'S DAY. Last session of State Legisl. in Detr. closed Michigan University founded, 1837. Stamp Act repealed LAST DAY OF WINTER. Battle of Bentonville, N. C. SPRING BEGINS. Police-wagon first used in Detroit. \$\$5,00,000 Michigan internal improvement loan. Michigan Sunday-school Union organized. Madrid taken by the French Spain acknowledges independence of U. S. ANNUNCIATION (LADY DAY). University of Virginia opened First U. S. land-office established at 1-ctroit Wards in Detroit constituted, 1839. Detroit Daily Post started Wards in Detroit constituted, 1839. Detroit Daily Post started Wards in Detroit constituted, 1839. Detroit Daily Post started	. 1864 . 1823 . 1887 . 1886 . 1866 . 1701 . 1625 . 1778 . 1883 . 1867 . 1767 . 1768 . 1887 . 1766 . 1887 . 1887 . 1887 . 1887 . 1887 . 1887 . 1887 . 1888 . 1894 . 1894 . 1848 . 1848 . 1848
Fou	rth	Mon	th		APRIL, 1889. 30 D	ays.

		For	Mich	igan.	PHASES OF THE MOON. D.	H.	M.
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon sets.	First Quarter.       8         Full Moon.       15         Last Quarter.       22         New Moon.       29	5 9	3 morn, 34 eve. 12 morn, 21 eve.
34567890112341516789012234256789	Tu We This Sat We This Sat Tu We This Sat Tu We This Sat Tu We This Sat	5 5 43 42 42 42 42 42 42 42 42 42 42 42 42 42	6 26 28 28 26 6 8 30 13 13 26 6 6 8 30 6 6 35 6 6 6 38 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8 44 9 46 5 11 1 40 mor 6 1 25 12 2 2 5 3 4 4 4 4 4 4 4 5 7 7 45 1 11 26 1 11 26 1 11 26 1 11 26 1 1 2 1 1 1 2 3 2 0 3 3 4 8 5 4 4 4 0	Election to first State Constitutional Conventic Election riot at St. Louis, 1852. Chili and Per Johnston's attack at Shiloh, 1862. Revolution Marietta, O., settled, 1788. Beauregard defeat Battle of Mansfield, La., 1864. Louisiana adm FLOWER SHOW OPENS IN DETROIT. Lee SUPPEN U.S. Bank incorporated, 1816. Fort Pulaski to Col. Hamtramck died, Detroit, 1803. Crimeau Detroit Board of Councilmen created Fort Sumter surrendered, 1801. James Bucha PALM SUNDAY. President Lincoln assassinater President Lincoln dies, 1865. 75,000 Union sold	son leber on son la eber on son la eber on son la eber on son la eber on	born 174 died 182 died 183 war 187 war 187 razil 183 t Shiloh 186 t 181 d 186 t 186 ar opens 185 born 173 called out 186 ect 186 klin died 179 lied 183 by Congress 180 ty died 183 ty died 183 ty died 183 ty Congress 180 thy died 183

Fifth	Month.	

## MAY, 1889.

31 Days

1	ForMich <b>i</b> gan.	PHASES OF THE MOON, D. H. M.
Month. Day of Week.	Sun Fises. Sun Sets. Moon	
Thistat South of the state of t	4 497 4 1 more 4 487 7 6 0 9 9 4 47 7 6 0 0 1 1 4 487 7 6 0 0 1 1 4 487 7 6 0 0 1 1 4 487 7 9 2 3 3 4 427 11 3 1 4 447 7 12 3 29 29 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hudson Bay Comp'y incorporated, 1670. Louisians purchased, 186 First municipal election in Detroit, 1802. Machiavelli born. 144 Anarchist riot and massacre in Chicago. 185 First White marriage at Detroit, 1710. Battle of Williamsburg. 186 Arkansas seceded, 1861. Bonaparte died, 1831, and Humboldt. 188 Pontiac's attempt on Detroit, 1763. Indiana Territory erected. 186 Earthquake atCape Haytlen, 1843. Treaty of Wash'gton signed. 187 Indian murders under Pontiac at Det. 1753. Pacific R. R. opened. 187 First Constitutional Convention in Detroit. 185 Jargestown settled, 1607. Battle of Rocky Face, Ga. 186 First Michigan Infantry left for war, 1861. Pius IX. born 157 Louis XIV. permits the lease of Detroit farms. 177 Third State Constitutional Convention, Lansing. 186 Auction sale of lots on site of Ft. Shelby, Detroit. 188 Marquette and Joliet leave St. Ignace for the Mississippi. 167 Grant begins the slege at Vicksburg, 1863. Matamoras taken. 187 Congressional land grant to Michigan University. 187 Grant first nominated for President, 1884. Dio Lewis died. 188 Gov. St. Clair in Detroit, 1798. Pope born. 168 Great Review of the Army of the Potomac, Washington. 188 Great Review of the Army of the Potomac, Washington. 188

Sixth I	Month.		JUNE, 1889.	30 Days.
Day of Month. Day of Week.	For Michigan Light Sent Section Sectin Section Section Section Section Section Section Section Section	- 1	PHASES OF THE MOON.         D. H. M.           First Quarter.         6 3 17           Full Moon.         20 2 51           Last Quarter.         18 9 41           New Moon.         28 4 9	eve. mor.
128 Mo Tue 66 Fri 88 S Mo 112 We 67 Fri 88 S Mo 112 We 134 Fri 168 Mo 115 S Mo 174 Fri 84 S Mo 175 Fri 84 S Mo	H M H M 1 4 26 7 30 1 4 25 7 30 1 4 22 7 38 4 22 7 38 4 22 7 38 4 22 7 38 4 22 7 38 4 22 7 38 4 22 7 38 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 1 4 22 7 39 3 1 4 22 7 3 39 3 1 4 22 7 3 3 3 1 4 22 7 3 3 3 1 4 22 7 3 3 3 1 4 22 7 3 3 3 1 4 22 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	M M 0 6 6 6 10 50 1 29 mor 0 34 1 1 1 59 2 18 3 10 0 11 24 11 57 mor 0 34 1 1 57 mor 0 50 1 16	Grayling and California trout season begins. Jno. Kel Kirby Smith and Magruder surrender. 1865. Treaty of Second Constitutional Convention, Lansing, 1850. Har Indian massacre at Ft. Mackinac	y d
36 Tu We Th Fri Hat	4.28 7 40 4.28 7 40 4.24 7 40 4.24 7 40 4.25 7 40	2 40 3 13 3 52 sets 8 50 9 31	First issue of the Detroit Gazette, 1817. Custer massa George IV. died, 1830; Admiral Foote, 1863; lavid Dav Destructive tornado in Detroit, 1875; Hiram Powers di Michigan Territory extended west of the Mississippi. Judge Woodward arrived at Detroit, 1805. Henry Cla Gen. Clarke starts for Kaskashia, 1778. Guiteau exect	cre1876 is1886 ed1879 1834 y died1850 ited1882

## Seventh Month.

## JULY, 1889.

31 Days.

. =	4	For	Mich	vigan.	- PHASES OF THE MOON. D. H. M.				
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon sets.	First Quarter     6     1     15 morn.       Full Moon.     12     4     18 eve.       Last Quarter     19     8     1       New Moon     27     7     16     "	٠,			
12345678901234567890122345678901	Th Fri Sat Mo Tu We Th Sat Sat Sat Sat Sat Sat	4 27 4 28 4 29 4 30 1 4 33 4 33 6 4 37 8 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7 400 400 7 7 39 39 37 7 38 38 37 7 3 37 7 3 38 37 7 3 37 7 3 32 4 3 7 7 7 3 32 4 3 7 7 7 3 29 3 7 7 7 7 2 2 7 7 7 7 2 2 7 7 7 7 2 7	10 6 10 37 11 32 11 159 11 32 11 159 11 32 11 159 11 32 2 11 32 2 14 32 3 3 3 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Michigan given up by British to Americans Territorial government in Michigan begins Territorial Medical Society founded in Detroit. Independence Day. Michigan judiciary organized. Gov. Porter died of cholera in Detroit. First auction of public lands in Detroit. Cholera and panic in Detroit, 1832. Burke died. Ex-President Van Buren in Detroit. Cholera and panic in Detroit, 1832. Burke died. Ex-President Van Buren in Detroit. First law by Governor and Judges of Michigan Tarritory. Abolition riots in New York City. English evacuate forts at Detroit. Gov. Hay arrives in Detroit, 1784. Hull invades Canada Ordinance for the Northwest Territory passed. Monroe county erected, 1817. Draft riots in New York. Northwest Territory organized at Marietta. Kent county, Canada, erected, including Michigan. Ft. Mackinac surrendered to the British. Emperor Maximilian shot by Mexican Government Michigan Soldiers' Monument completed. Harrison's treaty with Indians at Greenville. Moravians settle near Mt. Clemens Great war meeting in Detroit, 1868. Battle of Atlanta. Gen. Grant died, Mt. McGregor, N. Y. Cadillac founds Detroit (Ft. Ponchartrain). Battles of Lundy's Lane, 1814, and of Aboukir St. Anne's church, Detroit, founded. Site of Schenectady bought from Indians Battle of Ezra Church, Ga., 1864. Wilberforce died. Territorial Supreme Court organized. Petersburg mine exploded, 1824. Wm. Penn died. Massacre of British at Bloody Run, Detroit.				
Ejg	hth	Mo			AUGUST, 1889. 31 D	ays.			
Day of Month.	Day of Week.	Son rises:		Moon sets	PHASES OF THE MOON.         D. H. M.           First Quarter.         4 8 43 morn,           Full Moon.         10 11 59 eve,           Last Quarter.         18 6 7 morn,           New Moon.         23 9 16 "	•			
1234456789011231456789011232222222222222222222222222222222222	Sat Somulation of the	4 53 4 55 4 55 4 55 5 5 5 5 5 5 5 5 5 5 5 5	7 7 19 19 19 19 19 19 19 19 19 19 19 19 19	10 31 11 0 11 31 11 0 11 31 11 0 0 54 1 48 2 148 2 148 2 148 2 158 7 51 8 53 9 19 9 45 10 12 10 12 11 13 11 48 11 148 11 16 2 8 4 4 5 8 54 7 54 1 6 8 8 58	Michigan Industrial School for Girls opened. Croghan's defense of Ft. Stephenson. Wayne's Treaty of Greenville, 1795. Atlantic cable laid. First appropriation to build Ft. Wayne, Detroit. New city charter for Detroit, 1824. Gen. Howe died. George B. Porter Gov. Michigan Territory. Hull retires from Canada, 1812. Belfast riots. Battle at Monguagon, near Detroit, 1812. Napoleon banished. Louis Philippe king of France, 1830. Ex-Senator Bigler died. La Salle and the Griffin in Detroit river. Michigan Gold-mining Association organized. Lake St. Clair entered by La Salle's party and named. President Monroe at Detroit, 1817. Cortez in Mexico. Constitution of Maryland adopted, 1776. Admiral Farragut d. Wayne county, Northwest Territory, erected. Hull surrenders Detroit, 1812. Ney executed. Bombardment of Ft. Sumter by U. S. fleet begins. First English child born in America, Roanoke. Lord Dufferin in Detroit, 1874. Constitution capt. Guerriere. Wayne's victory over Indians at Fallen Timbers. Proctor's victory over Indians at Fallen Timbers. Proctor's roclamation at Detroit, 1812. La ayette a prisoner. New Mexico acquired by U. S., 1846. Great rain in England. Com. Perry died. Financial panie begins, 1857. Gov. Vance of Ohio died. Delaware Bay discovered, 1609. Battle of Ream's Station. Land grant for Sault Canal, 1852. British enter Washington Pontiac makes peace. 1765. First army draft in Detroit. Steamer Walk-in-the-Water at Detroit. Garibaldi captured, 1862. Petropaulovski bombarded. Sixth Michigan Infanty leave for war. Charleston earthquake, 1886. Judge Manning died	1868 1567 1813 1794 1799 1890 1852 1864 1814 1814			

#### Ninth Month.

#### SEPTEMBER, 1889.

30 Days.

Day of Month.	Day of Week.	For Michigan.		PHASES OF THE MOON. D. H. M.
		Sun rises. Sun sets.	Moon sets.	First Quarter 2 2 50 eve. Full Moon. 9 8 mor. Last Quarter 17 0 5 " New Moon. 24 9 58 eve.
1234567890112341567890112344567890	Tu We This Sat Son Tu We This Sat Son Tu We This Sat This	5 41 6 7 5 42 6 6 5 43 6 8 5 46 6 8 5 47 5 58 5 48 5 56 5 50 5 53 5 50 5 54 5 50 5 48 5 50 5 50 5 50 5 50 5 50 5 50	10 7 10 47 11 36 mor 0 35 1 41 2 52 4 6 6 rises 7 19 7 6 8 12 8 8 12 9 9 9 9 9 9 9 9 9 9 10 21 11 54 2 10 10 10 11 54 2 10 10 10 11 54 2 10 1	Harrison's army lands below Malden

#### Tenth Month

#### OCTOBER, 1889

31 Dave

len	ith	Mon	tn.		OCTOBER, 1889. 31 L	Jays.
		Forl	Mich	igan.	PHASES OF THE MOON. D. H. M.	
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon sets.	First Quarter       1       8       49 eve,         Full Moon       8       8       41       "         Last Quarter       16       7       53       "         New Moon       24       9       42       mor.         Last Quarter       31       3       46       "	
1 2 3 4 5 6 7 8 9 10 11 2 14 15 16 17 18 11 18 11 18 11 18 11 18 18 18 18 18	Tue The Sat Mount of Th	H M 5 57 5 59 5 0 6 1 6 2 6 8 6 4 6 5 6 6 6 10 6 10 6 12 6 13 6 14 6 15 6 17	H M M H M M M M M M M M M M M M M M M M	H M 10 80 11 34 mor 0 44 14 15 53 8 4 4 14 rises 6 11 6 40 7 8 18 9 9 48 10 40 11 87 mor	Hunting wild turkey begins. Internal revenue tax levied  Maj. Andre hanged, 1780. W. E. Channing died.  Battle of Corinth, 1862, and of Wurtemburg.  Battle of Germantown, 1777. George Bancroft born.  First election to Michigan Constitutional Convention.  Coleron's expedition at Detroit, 1749. Battle of Allatoons.  Commodore Perry at Detroit, 1813. Cholera in Philadelphia Elmwood Cemetery opened, Detroit, 1846. Chicago fire  Lewis Cass b., Ex 'ter, N. H., 1782. Treaty of Aix la Chapell Judge Woodward reports on Detroit land titles  Dr. Kane's second expedition returns, 1855. Franklin Pierce of Columbus discovers America, 1492. King John died.  Dr. Houghton drowned in Lake Superior, 1845. Murat shot. Gen. Cass appointed Provisional Governor of Michigan.  Bonaparte arrives at St. Helena, 1815. Bank panic.  John Brown raid at Harper's Ferry.  Burgoyne's surrender at Saratoga, 1777. Battle of Leipsic.  Harmar's defeat by the Indians, 1790. Cornwallis surrender Errst General Court, held in Roston.	1842 1813 1800 1835 1866 1871 e1815 1805 d1866 1216 1815 1815 1857 1858 1813 1859
28 24 25 26 27	We Th Fri	6 28 6 26 6 26 6 27	5 6 5 8 5 2 5 0 4 59	4 58 6 9 sets 6 44 7 29	Col. Baker killed at Ball's Bluff, 1861. Lord Nelson died Cornerstone Territorial Capitol laid, Detroit. Explosion of the Lucy Walker, 1844. Irish Rebellion. New City Charter for Detroit, 1815. Partition of Poland Ninth Mich. Infantry leave for war, 1861. Battle of Balaklavi Mackinac county erected, 1818. Antwerp captured Twenty-eighth Mich. Infantry leave for war, 1861. Hogarth of Brutus died, 45 B. C. Gallant defense of Decatur, Ala.	1796 3.1854 1630 1.1765 1864
28	Mo Tu We Th	6 28 6 29 6 30 6 32	4 58 4 57 4 56 4 54	8 23 9 25 10 33 11 48	Brutus died, 45 B. C. Gallant defense of Decatur, Ala.  Battle of White Plains, 1776. Bartholdi Statue dedicated. Gen. Cass appointed Gov. Mich. Ter., 1813. Raleigh executed Nevada admitted, 1864. John Adams b., 1735. Gov. Andrew d. Detroit ceded to "Company of Canada".	1886 1.1618 1867 1701

#### Eleventh Month.

### NOVEMBER, 1889.

30 Days.

2 8	Fri Sat	6 34	4 52 4 51 4 50	0 51	Deer-killing allowed in Lower Peninsula. Z. Chandler d. Territorial Legislature meets in Detroit, 1835. T. Pinckn. Wayne County Rible Society organized.	1879 .ey d. 1828 1830
456	Mo# Tu We	6 38 6 39 6 40	4 49 4 48 4 47	8 9 4 14 5 19	St. Clair's defeat by Indians, 1791. George Peabody died Moravian church consecrated on the Clinton Saloons first closed election day in Detroit, 1877. Gen. Mea	1869 1782 ide d 1872
2845678901 1011	S	6 48 6 44 6 45	4 44 42	fises 6 12 6 51	Lincoln re-elected President, 1884. Cortez enters Mexico Gov. Hamilton arrives in Detroit, 1775. Milton died. Luther b., 1483. Wirz executed, 1865. Stanley met Livings	1601 01519 1674 stone.1871
12	Mo Tu We Th	6 48	4 40	7 36 8 26 9 21 10 20	Dark day at Detroit, 1827. Carleton escapes from Montr Montreal surrendered to Montgomery, 1775, Meteoric dis	real 1775 play . 1833
14 15 16 17 18	Fri Sat	6 58	4 88	11 21 mor 0 24 1 29	Hunting deer stops in Upper Peninsula. Fort Mifflin tak Sherman's March to the Sea begins, 1864. Boston tea pa	ren1777 irty1778 icis b.1789
19 20 21 22	Tu We Th	6 57 6 58 6 59	4 85 4 84 4 83	2 36 3 45 4 57	Detroit Tribune tirst issue, 1848. Napoleon crowned Emp Chloroform first used, 1847. Henry Wilson died	eror . 1804 1875 1815
23	Sat	7 2	4 32	6 11 sets 6 9 7 9	Cheboygan Opera House and City Hall burned	1886 1814 1572
26 27 28	Tu We Th	7 6	4 80 4 80 4 80	8 16 9 28 10 41	Encke's comet discovered, 1818. East India Co. organize Battle of Ringgold, Ga., 1863. Stereoty ping invented. THANKSGIVING DAY. Ohio admitted, 1802. Irving died	ed1700 1725 1856
30	Fri	7 9	4 28	11 52 mor	English under Maj. Rogers occupy Detroit, 1760. Polish re Deer-killing in Lower Peninsula stops. Jeff C. Davis die	ed187

==							<u> </u>
		For.	Mich	igan.	PHASES OF THE MOON. D. H. M.		
수육	أيديه					morn.	
• <del>2</del>	୍ ୧ ୫	2	23	<b>¤</b> 33 !	Last Quarter	44	
	>≥	모든	₽ 32	88	New Moon	"	
Day of Month.				Moon sets.	First Quarter 29 0 82	••	
	_	нм	H M	H M	7 0 1 1 2 1 1 1 1		
1 2 3	3	7 10	4 28	1 3 2 8	First Sunday in Advent. Czar's life attempted		879
×	:Mo	7 11	4 28	2 8	Congress meets. Steamer Winfield Scott lost		
3	Tu	7 12	4 28	3 13 4 14	Illinois admitted, 1818. Louis Napoleon, dictator Fifth Michigan cavalry leave for war, 1862. Richelieu	.,	801
4	we	7 13	4 20	4 14	Harri diagonard 1400 Morant died	a1	201
, 2	LIII	7 15	4 20	6 18	Hayti discovered, 1432. Mozart died	mma 1	KAD.
×	Sot	7 16	1 24	riges	Colfax selected Speaker, 1863. Washington's farewell	i sparfihe	70A
Ŕ	2	7 17	4 28	5 16 6 18 rises 5 35 6 22	Father Mathew died 1857. Henry Laurens died	1	702
ă	Mo	7 18	4 28	6 22	Moravians tried at Detroit, 1781. Milton born	1	608
1ŏ	Tu	7 19	4 28	7 16	Mi-sissippi admitted, 1817 H. R. Schoolcraft d., Wasl	nington.1	864
īi	We	7 90	4 28	8 13	Father Mathew died, 1857. Henry Laurens died Moravians tried at Detroit. 1781. Milton born. Mi-sissippi admitted, 1817. H. R. Schoolcraft d., Wasl Indiana admitted, 1816. Battle of Fredericksburg	1	862
12	Th	7 21	4 28	9 13!	Michigan Cavairy Brigade organized at Washington	1	1862
13	L'mi	7 20	4 98	10 13	Ev.Gov Croswell died at Adrian 1886 Dr Sam'l John	nson d1	1784
14	Sat	7 23	4 28	11 14 mor 0 17 1 23	People's ("frost-bitten") Convention at Ann Arbor	1	886
15	S	7 24	4 29	mor	The Ohio boundary for Mich. ratifled, 1836. Beethove	n born.1	770
16	Mo	7 24	4 29	0 17	New Madrid, Mo., destroyed by earthquake		812
17	Tu	7 25	4 29	1 23	Gov. Hamilton captures Vincennes, 1778. Bolivar die	d	880
18	we	7 20	4 29	2 31	Thirteenth amendment ratined abolishing slavery	]	865
12	In	7 20	4 29	8 43	Fort Niagara taken, 1813. Felix Grundy died Great Britain declares war against Holland	••••••	020
20	FIL	7 20	4 90	6 14	Chopmen by on the Aby Minter Distriction		700
20.0	Dan	7 57	4 31	DOTE:	Great Britain declares war against Holland		ioón.
22	MA	7 97	4 31	5 57	Washington resigns his commission 1782 Revolution in	n Hevti 1	NKR
24	Th	7 28	4 32	7 12	Treaty of Ghent, 1814. Johns Hopkins died	1145 01.1	879
25	We	7 28	4 32	8 27	CHRISTMAS		
26	Th	7 28	4 33	9 42	Michigan part of Upper Canada, 1791. Gen. Logan di	ed1	886
27	Fri	7 29	4 33	10 53	Two Indians executed at Detroit, 1821. Wm. H. Dixo	n died	1879
28	Sat	7 29	4 34	12 0	Treaty of Genetic 1814. Johns Hopkins died.  CHRISTMAS.  Michigan part of Upper Canada, 1791. Gen. Logan di Two Indians executed at Detroit, 1821. Wm. H. Dixo Cincinnati founded, 1788. Dade's massacre by the Ind M. C. R. R. opened to Jackson, 1849. Gladstone born.	ians	1885
29	8	7 29	4 85	mor	M. C. R. R. opened to Jackson, 1849. Gladstone born. Soldiers' Home at Grand Rapids dedicated	1	1889
au	·MO	1 290	4 30	1 0	boldiers nome at Grand Kabius dedicated		
81	Tu	7 30	4 87	2 11	Hunting several kinds of birds prohibited. Battle Stone	e River. 1	1866

### Practical Information.

#### Almanacs and Year-books.

The ordinary "year-book" is the alma-Bac. This word comes from Arabic at and manak, the "counter" or "register." Formerly astrological and other absurd predictions, and later weather proplecies, were included; but a better use is now commonly made of the year book, as in this first of THE DETROIT JOURNAL series, as a means of conveying a great variety of entertaining and useful information. The Greeks of Alexandria had a sort of almanac, but the time of its advent in Europe is unknown. or its arvent in Europe is utanswn. The oldest extant, still in manuscript, dates in the 14th century, and is kept at the University of Cambridge. The first printed almanac covers a trirty-year period, 1475-1506. The Liegeois Almanac was first publish d at Liege, France, in 1636, and has not since missed a year. It circulates enormously among the peasantry and unlettered classes, on account of the superstitions it retains and because it can be used by persons who do not read, familiar symbols being put in many cases for words. A figure of a vial shows in what phase of the moon medicine should be taken, a lancet when there should should be taken, a fancet when there should be bloot-letting, and a pair of scissors directs hair-cutting. In England a monopoly of almanacs was early grant-d to the two universities and the Stationers' Company, the latter of which still prints the great British Almanac, begun in .828. Poor Robin's Almanac was one of the older publications. Scotland bad almanacs userit 400 tions. Scotland had almanacs nearly 400 years ago, and by 1677 their annual circulation amounted to 50,000 copies, as they were full of predictions and sold cheap. The Edinburgh Almanac, begun five years after with sixteen pages, now fills more than 1000. Thom's Irish Almanac does a similar service for Ireland. The French Almanach Imperial, the Belgian and Prussian Royal Almanacs, and the Almanach de Gotha, are old and notable publications. The last-named | readers.

dates from 1764, and is the first authority in the world as a register of governments and rulers, and a compendium of political information. It is a pocket volume of about formation. It is a potter volume of acoust 1000 pages in fine type, published in French and German. The Nautical Almanac, started in London in 1767, and the Connoissance des Temps, begun at Paris in 1769, are still valuable scientific and practical annuals. Other foreign almanacs of special

nuals. Other foreign almanacs of special character long ago prepared the way for the innumerable publications of the kind now devoted to advertising purposes or to religious, political, or other propagands. In this country the first almanac was probably that printed by Wm. Bradford at Philadelphis in 1887, soon followed by others in New York at d Boston. They abounded in wild readictions and quaint conventions. in wild predictions and quaint, sometimes very absurd advice, and besides them and the calendar, contained little else than a meager recital of strange occurrences, some history and mythology, often inaccurate, and sometimes a rude drawing or two of an and sometimes a rude drawing or two of an Indian massacre. The most famous of these is Poor Richard's Almanac, issued by Benjamin Franklin for about 25 years. From it were drawn many of the pithy and wise sayings conspicuou-ly quoted in The Detroit Journal during the past year. The American Almanac, first printed in 1828, is among the most famous and useful of our year-hole in the land of the past year. year books. It is a large and well-filled compendium of statistics and other information, prepared by A. R. Spofford, Librarian of Congress. Mr. Greeley's Whig (now the Tribune) Almanac was first issued in 1841, and is invaluable for political statistics. Most of the great newspapers of the country now publish year-books, not the least useful of which for the coming year we trust will be that of The Detroor Journal, now submitted to its host of

#### The Calendar.

It is probable that the reckoning of time began with the lunar month of 29 or 30 days, and that the year was suggested by the round of the seasons. But an even number of lunar months does not make a number of lunar months does not make a solar year, or complete revolution of the earth around the sun. The Egyptians accordingly had a year of twelve 30 day months, adding five days at the end to make 355. The Jews used the lunar month also, alternately of 29 and 30 days, but at intervals added a short thirteenty months. int-rvals added a short thirteenth month; and Solon ordained a like arrangement at Athens. The early Roman year was of ten months, but the kings adopted the older system, which was reformed by Julius Cassar. He established 365 days as the calendar year, with a day added to February every fourth year. The days gained d ring the confusion of more than four centuries were dropped, so that the year 46 B. c. had but 445 days. Thus began the Julian Calendar. Under it, however, there is one day too many in about 139 too many in about 128 years, as the solar year is not quite 36514 days; and in 1582 Pope Gregory XIII. decreed the suppression of ten days from that year, and that the final year of a century should not be a leap year, unless evenly divisible by 400. The bregorian Calendar was soon adopted by the Catholic nations, but not in England Gregorian Calendar was soon adopted by vear began in March, and in many parts of Europe the year opened with March 25 Annunciation or Lady Day. The later

and the day after Sept. 2 became Sept. 14. George Washington was born Feb. 11, O. S., "old style," which is retained in Russia and Greece, with an error now of twelve days.

Greece, with an error now of twelve days. The Christian chronology, dating forward and back from the birth of Christ, was proposed by Dionysius, a monk, 527 A. D., but with an error of four to five years, as is now pretty well proved. The year 1839 as probably 1893 or 1894 after the incarnation. About thirty other eras are known to history, the more famous of them the Olymtory, the more famous of them the Olymplads, 178 B. C. to 440 A. D., in periods of four years; the Roman, dating from the founding of the city (A. U. C.), 75 B. C.; and the Mohammedan, from the hegira or flight of Mohammed to Medina, July 16, 622 A. D. The year of the world (A. M.) is given by adding 4004 B. C., the year of creation in the Ussher chronology, to the given year A. D., as 5893 for 1889. Over 200 calculations of the creative year, however, vary from 3102 to 6981 B. C.

The Romans gave the months the names we have, with slight changes in form; and Cesar directed their allotments of days. September to December, however, were originally the seventh to tenth months, as their names indicate. The Roman and Greek was been in Mean and the construction.

Romans adopted Jan. 1 for the first day; but France received it so late as 1563, Scotland 1600, England 1752, Dates between Jan. 1 and March 24 were often expressed thus: Jan. 30, 1648-9, time of King Charles's execution, 1648 in England, 1649 in Scotland. Washington's birthday appears in the fam-ily Bible as occurring Feb. 11, 1734. Christ-mas or Easter in some lands began the year. Our day names come from the old super-stition that a heavenly body—in order the sun, moon, Mars, Mercury, Jupiter, Venus,

Saturn-presides over the first hour of each day. The last five names became dermanized, and in time took their present form. The ecclesiastical day was from sunset to sunset, and many persons still keep their Sabbath accordingly. The international date-line, at which navigators westward drop one day and eastward add one, is a very irregular line in the Pacific Ocean, between 117° east and 168° west longitude, with a general north and south directions. tion.

#### Standard and Local Times.

Five years ago, the numerous and confusing standards of time in the running arrangements of American railways demanded a reform. Oct. 11, 1883, a Railway Time Convention met in Chicago, and adopted a uniform and admirable system, that went into general use Nov. 18 following. Its basis is the difference of one lowing. Its basis is the difference of one hour's time for every fifteen degrees of longitude, since the sun (apparently) compasses the globe (360°) in 24 hours. A series of standard meridians was adopted,—60°, 75°, 90°, 105°, and 120° west from Greenwich,—each of which was made the centre of a helt of 450° width, the houndary lives of each of which was made the centre of a belt of 15° width, the boundary l'nes of which, as 67° 80′, 82° 30′, etc., should approximately limit the use of standard times. The solar times on these meridians give the standard times, which are of course half an hour fast on the western limit and as much alow on the eastern. The standard meridian for Atlantic or Intercolonial time (60°) passes between Newfoundland and Nova Scotia; that for Eastern time, near Ogdensburg, N. Y.; Central, through New Orleans and St. Louis; Mountain, near Denver, Colo.; and Pacific, about 2° 80′ east of San Francisco. Eastern standard time reaches from the further boundary of Maine to the Debelt of 15° width, the boundary lines of which, as 67° 80′, 82° 80′, etc., should approximately limit the use of standard times. The solar times on these meridians give the standard times, which are of course half an hour fast on the western limit and as much alow on the eastern. The standard meridian for Atlantic or Intercolonial time (60°) passes for Atlantic or Intercolonial time (60°) passes that for Eastern time, near Ogdensburg, N. Y.; Central, through New Orleans and St. Louis; Mountain, near Denver, Colo.; and Pacific, about 2° 80′ east of San Francisco. Eastern standard time reaches from the further boundary of Maine to the De-

troit and St. Clair rivers, although none of these are exactly on the bounding meridi-Passengers crossing eastward set their watches an hour ahead; westward, an hour behind. All Michigan railroads run by Central standard time, which prevails from De-troit, Port Huron, and Sault Ste. Marie to Mandan Dak., North Platte, Neb., Dodge City, Kan., and elsewhere on the transcontinental lines. Our State law requires its use in elections, courts, banks, and public offices. Many of our towns and cities substituted it for the local time, but some of them have returned to the latter, as Detroit, where the difference is 28 minutes.

#### Signs of the Zodiac.

The Zodiac is the name anciently given to an imaginary belt of about 16° in width, with the ecliptic or apparent path of the sun in the middle, and extending around the celestial sphere. The stars thus included celestial sphere. The stars thus included were grouped in twelve constellations, each in a tract of 30° length, thus occupying the full circle. They received the names Aries, or the Ram; Taurus, the Bull; Gemini, the Twins; Cancer, the Crab; Leo. the Lion; Virgo, the Virgin; Libra, the Balance; Scoriet Manager of the Crab; Leo. the Crab; Leo. the Lion; pio, the Scorpion; Sagittarius, the Archer; Capricornus, the Goat; Aquarius, the Water-bearer; and Pisces, the Fishes. Each has its appropriate symbol, which may be learned from the books on astronomy or the appendix to either of the great American dictionaries, and used in the interpretation of monthly calendars. Together the constellations are called the Twelve Signs of the Zodiac. They are held to begin with

Aries at the equinoctial point where the sun crosses from south to north, and to lie in the order given. When the sun advances eastward 30° along his path, he enters the sign of Taurus, then Gemini, and so the sign of Taurus, then Gennin, and so on, recrossing the equinoctial, going southward, between Virgo and Libra. A very slow movement of the equinoctial points (50" annually) has caused the separation of the sign Aries from the constellation of that name, and similarly, of course, around the entire great circle, causing the sign Aries to occupy pretty nearly the field of the constellation Pisces. It is calculated that 25,868 years will complete a circuit of these changes. Modern astronomy makes little account of the Zodiac. superstitions relating the signs to parts of the human body are illustrated in most of the oldest and many of the later almanacs.

#### For Birthdays and Other Days.

To name the day of the week, when a date is given: Divide the number of the year by 4, rejecting the remainder, if any. To this divi-dend and quotient add the number of days in the year to the given date, inclusive, always reckoning \$8 days in February. Divide the sum by 7, and the figure of the remainder will be the number of the day of the week, 0 signifying Saturday. E. g., this is Oct. 17, 1888:

4)1888

290 7)2650 The 4th day, Wednesday.

Dâtes between Jan. 1 and Feb. 23, in leap
years, both inclusive, must have 1 subtracted, to balance the 1 added by the even division of the year, which is not yet offset by Feb. 29. All dates in 1800, and any other by Feo. 28. All GRICES III 1000, and any owner terminal year of a century, except one equally divisible by 400, must be similarly treated, as these are not leap years. Dates in 1752, after Sept. 2, must have 11 added, on account of the change from old to new style.

This rule may be pleasantly used to get names of days on which wedding anniversaries and other events are coming in the

future, as well as for past dates.

#### Table for Weather Prophecy.

If New Moon,	Moon, F	irst Qua Quarter,	rter, Full	IN SUMMER.	, in winter.		
Betwee	n midnig	ht and	o'clock	Fair	Frost,	unless wind southwest.	
66	2 and 4	mornin	<b>e</b>	Cold and showers	Snow	and stormy.	
46	4 and 6		<b></b>	Rain	Rain.	,	
66	6 and 8	44		Wind and rain	Storm	١٧.	
44	8 and 10	66	/	Changeable	Coldr	ain if wind w. snow if e.	
44	10 and 12			Frequent showers	Cold &	and high wind.	
**	12 and 2	afterno	oon	Very rainy	Snow	or rain.	
44	2 and 4	**		Changeable	Fair a	nd mild.	
16	4 and 6	и		Fair			
44	6 and 8	64		Fair if wind northwest	Faira	nd frosty if wind n or ne	
**	8 and 10	**		Rainy if south or s. w	Rain	or snow if s. or s. w.	
**	10 and m	idnight		Fair	Fair a	nd frosty.	

OBSERVATIONS.—1. The nearer the time of the moon's change, first quarter, full, and last quarter are to midnight, the fairer will be the weather during the next seven days. 2. The space for this calculation occupies from ten at night till two next morning. 3. The nearer to midday or noon the phases of the moon happen, the more foul or wet weather may be expected during the next seven days. 4. The space for this calculation occupies from ten in the forenoon to two in the afternoon. These observations refer principally to the summer, though they affect spring and autumn nearly in the same ratio. 5. The moon's change, first quarter, full, and last quarter, happening during six of the afternoon hours, i.e., from four to ten, may be followed by fair weather, but this is mostly dependent on the wind, as is noted in the table. 6. Though the weather, from a variety of irregular causes, is more uncertain in the latter part of autumn, the whole of winter, and the beginning of spring, yet in the main the above observations will apply to those periods also. 7. To prognosticate correctly, especially in those cases where the wind is concerned, the observer should be within sight of a good vane where the four cardinal points of the heavens are correctly placed.

#### Wind and Weather Signals.

The new system of the United States Signal Service, going into operation March 1, 1887, is as follows: Flag No. 1, white square, indicates clear or fair weather; No. 2, blue square, rain or snow; No. 3, black triangle, temperature fiag; No. 4, white square, black in the center, cold wave, usually ordered up at least 24 hours in advance. When it is up, No. 3 is not shown. When neither appears, stationary temperature is expected, or a variation not exceeding 5° from the same hour of the previous day. When No. 3 is placed below No. 1, the indications are fair weather, colder; below No. 2, colder, after rain or snow; above both 1 and 2, warmer, fair weather, rain or snow following; No. 4, below No. 1, indicates fair weather, cold wave. Nos. 4, 2, 1, 3, shown together in this order, prophesy cold wave, followed by rain or snow, this by fair weather, colder; 3, 1, 2, warmer, fair, then rain or snow. If the flags are displayed

horizontally, a small streamer shows from which end they are to be read.

The danger or storm signal is a red, square flag, with black centre. Yellow, with white-center, is the cautionary signal, but promises winds that well-appointed and seaworthy vessels may encounter safely. Thered pennant, a rather long triangle, indicates winds easterly, from northeast to-south inclusive, with storm-centre approaching; the white pennant westerly winds, from north to southwest inclusive, and in general that the storm-centre has passed. The former above the cautionary or storm signal prophesies probable winds from the northeast quadrant; below, winds from the southeast. The latter similarly indicates probabilities of wind from the northwest and southwest. The night storm signals are a red light for easterly and a red and whitelight for westerly winds.

light for westerly winds.

Many railway trains in Michigan carry on the sides of baggage cars weather signals.

#### More Weather Wisdom.

The following are abridged from Admiral Fitzroy's Observations on Weather, published by the London Board of Trade:

A rosy sky at sunset, clear or cloudy, indicates fine weather; Indian-red tint foreshadows rain. Red sky in the morning, bad weather or much wind, perhaps rain; gray sky, then fine weather high dawn, wind;

section of mich which, perhaps rain; gray is key, then fine weather high dawn, wind; low dawn, fair weather. Soft-looking or delicate clouds promise fine weather, with light or moderate breezes; hard-edged, oily-looking clouds, wind. A dark, gloomy blue sky means wind; but a light, bright blue sky indicates fine weather. Generally, the softer clouds look the less wind (but perhaps more rain) may be expected; and the harder, more "greasy," rolled, tufted, or rugged, the stronger the coming wind will prove. Also a bright, yellow sky at sunset presages wind; a pale yellow, wet; and a greenish, sickly looking cooks, wet; and a greenish, sickly looking second stretal rain; light scud-clouds, driving fine.

across heavy masses, show wind and rain; but if alone, may indicate wind only.

High upper clouds crossing the sun, moon, or stars in a direction different from that of lower clouds, or the wind then felt below, portend a change of wind towards their direction. After fine, clear weather, the first signs in the sky of a coming change are usually light streaks, curls, wisps, or motted patches of distant white clouds, which increase and are followed by an overcasting of murky vapor, that grows into cloudiness. This appearance, more or less oily or watery, as wind or rain will prevail, is an infallible sign. Usually, the higher or more distant such clouds seem to be, the more gradual but general the coming change of weather will prove.

Misty clouds forming or hanging on

Misty clouds, forming or hanging on heights, show wind and rain coming, if they remain, increase, or descend; if they rise or disperse, the weather will improve or become

A Section 18 Acres

#### Postal Information.

The rates of postage and classes of mailable matter in the United States, including Alaska, are as follow:

First Class.—On letters and all mail matter closed against inspection, two cents for each counce or fraction thereof, excepting postal-cards or letters for local delivery mailed at a post-office where no letter-carriers are employed, when the rate is one cent per ounce or fraction thereof. Productions by the type-writer or manifold process are subject to letter rates. Letters to be delivered by messenger at once upon arrival must have a special-delivery stamp attached, costing ten cents. Anything attached to a postal card, except a printed address-slip on the address side, subjects it to letter postage. Anything scurrilous or indecent upon a card prevents its forwarding. If a letter is prepaid one full rate it will be sent, and the remainder, if any, collected of the recipient.

SECOND CLASS.—On newspapers and magazines, including papers and periodicals published regularly at least four times a year, one cent for each four ounces when mailed by the public, and one cent per pound when mailed by the publishers. Advertising sheets or free publications, and those not having legitimate subscribers, pay third-class rates. To actual subscribers in the county of publication, rostage is free, except to free-delivery offices.

Then Class.—On circulars, books, pamphlets, proof-sheets, corrected proofs, and manuscript copy accompanying either, business cards, hand-bills, engravings, music, chromos, and other matter wholly in print, not exceeding four pounds in weight, one cent for each two ounces or fraction thereof. The limit of weight is four pounds, except where a single volume of a book shall exceed that weight. The sender may write his name on the wrapper, preceded by the word "from," or may mark a passage of the text in a book or paper, or write on a fly-leaf a simple inscription. Packages must be wrapped with open sides or ends, or otherwise made easy of inspection. Immoral or lottery matter is barred out.

FOURTH CLASS.—Articles of merchandise which by their form and nature are not liable to destroy, injure, or deface other articles in the mail, or harm the person of any one in the postal service, and not exceeding four pounds in weight, one cent per ounce or fraction thereof. They must be so wrapped as to admit of examination, and be fully prepaid. Poisons, explosives, infammable articles, live animals or insects, and bad smelling substances, will not be sent. Other articles liable to injure person or property may be sent if properly protected. Not more than four ounces of liquid or oil can be mailed, or over four pounds of other merchandise. Name and address of the sender, preceded by "from," a list of articles enclosed, and request to return, may be written or printed on the

wrapper.

Any matter, except second-class, may be registered for greater care and surer delivery for 10 cents, besides postage; but the post-office is not liable in case of its loss. Money orders, payable in the United States, not exceeding \$5, cost 5 cents; \$5 to \$10, 8 cents; exceeding \$10 to \$15, 10 cents; exceeding \$10 to \$15, 10 cents; exceeding \$15 to \$40, 20 cents; exceeding \$40 to \$60, 25 cents; exceeding \$50 to \$60, 30 cents; exceeding \$60 to \$70, 35 cents; exceeding \$70

to \$80, 40 cents; exceeding \$80 to \$100 inclusive, 45 cents. Postal notes under \$5, payable to bearer, 3 cents. International money orders, payable in foreign countries, Canada, Great Britain and Treland, British India, Constantinople, Egypt, Hong Kong, Germany, Denmark, Iceland, Norway, Luxembourg, the Netherlands, Switzerland, Austro-Hungary, Italy, Belgium, Sweden, Portugal, the Azores and Madeira Islands, France and Algiers, Jamaica, Barbadoes, Grenada, St. Lucia, St. Vincent, Tobaga, Antigua, Dominica, Montserrat, Nevis, St. Christopher, and Virgin Islands, may be had for 10 to 50 cents, according to amount.

Postage to Canada is the same as to places in the United States. Packages not letters must be so wrapped or inclosed that they can be easily examined. Most foreign countries are in the Universal Postal Union, with uniform rates as follow:

First Class.—Five cents per half ounce. Includes personal correspondence and sealed packets. Postal cards, two cents

THIRD CLASS (printed matter).—One cent for each two ounces. Includes newspapers, books, miscellaneous printed matter, commercial papers, and book manuscripts. Limit of weight, four pounds six ounces; of dimensions, two feet in length by one foot in width.

FOURTH CLASS (samples, etc.)—One cent for each two ounces. Includes samples of merchandise and patterns. Limit of weight, 8% ounces, except to France, Great Britain, Belgium, Switzerland, and the Argentine Republic, where the limit is 12 ounces, Dimensions—length eight inches, breadth four inches, depth two inches; in the latter case, length i welve inches, width eight inches, depth four inches, depth four inches.

EXCLUDED.—All articles not mailable for demestic delivery, letters or packets containing gold or silver, jewelry (r coin, or any article liable to customs duty.

Suggestions to the Public (from the Official Postal Guide).—Mail all letters, etc., as early as practicable. e-pecially when sent in large numbers, as is frequently the case with new-papers and circulars. The trouble of the post-office is much diminished if letters, when mailed in large numbers, are tied in bundles, with the addresses all in one direction.

one direction.

Make the address legible and complete, giving the name of the post-office, county, and State. The name of the street and number of the house should also be given on letters addressed to cities where letter-carriers are employed; while the letter will eventually reach its destination without a number, the omission is often a cause of hesitation and delay. In the case of letters for places in foreign countries, and especially in Canada, in which country there are many post-offices having the same names as post-offices in the United States and in England, the n me of the country as well as the pret-office should be given in full. Letters addressed, for instance, merely to "London," without adding "England," are frequently sent to London, Canada, and vice versa, thereby causing delay, and often serious loss. Letters addressed to Burlington, New York, on account of the resemblance between 8 and Y when carelessly written. It would be better to write out

Avoid, as much as possible, using enveloper made of thin paper, especially where more than one sheet of paper, or any other article than paper, is enclosed. Being often handled, and even in the mail-bags subject to pressure, such envelopes not unfrequently split open, giving cause of complaint against officials who are entirely innocent in the matter.

Never send money or any other article of value through the mail, except either by means of a money-order or in a registered letter. Any person who sends money or jewelry in an unregistered letter not only runs a risk of losing his property, but exposes to temptation every one through whose hands his letter passes, and may be the means of ultimately bringing some

clerk or letter-carrier to ruin.

See that every letter contains the full name and post-office address of the writer, with county and State, in order to secure the return of the letter, if the person to whom it is directed cannot be found. A much larger portion of the undelivered letters could be returned if the names and addresses of the senders were always fully and plainly written or printed inside or on the envelopes. Persons who have large correspondence find it most convenient to use "special request envelopes;" but those who only mail an occasional letter can avoid much trouble by writing a request to "return if not delivered," etc., on the envelopes. When dropping a letter, newspaper, etc., into a street mailing box, or into the receptable of a post-office allowed as the contract of the contract o

When dropping a letter, newspaper, etc., it to a street mailing box, or into the receptacle at a post-office, always see that the packet falls into the box, and does not stick in its passage; observe, also, particularly whether the postage-stamps remain securely

in their places.

Postage-stamps should be placed on the upper right-hand corner of the address side.
Postmasters are not obliged to accept in payment for postage stamps or stamped envelopes, wrappers, etc., any currency which may be so mutilated as to be uncurrent, or the genuineness of which cannot be clearly

ascertained. They are not obliged to receive more than twenty-five cents in copper or nickel coins. They are not obliged to affix stamps to letters, nor are they obliged to make change except as a matter of courtesy. They must not give credit for postage.

They must not give credit for postage.

Letters cannot be carried out of the mail except in postage-stamped envelopes. There is no objection to a person who is not acting as a common carrier carrying a sealed letter, whether in a stamped envelope or not; but to continue the practice, or receive money for so doing, would subject the party to a penalty of \$150. Newspapers, magazines, and periodicals may be carried out of the mail for sale or distribution to subscribers, but if they are put into a post-office for delivery the postage must be paid thereon.

It is forbidden by the regulations of the

It is forbidden by the regulations of the Post-office Department for postmasters to give to any person information concerning the mail matter of another, or to disclose the name of a box-holder at a post-office.

Mail-matter deposited in any receptacle erected by the Post-office Department, such as street mailing-boxes for the reception of mail-matter to be collected by letter-carriers, or boxes in railroad depots for the reception of matter to be collected by employes of the railway mail service, cannot be reclaimed by any one under any circumstances. Persons depositing letters in the latter, intended for city delivery, do so at their own risk, and cannot reclaim them except through the Dead-letter Office.

Letters addressed to persons temporarily sojourning in a city where the free delivery system is in operation should be marked "Transient" or "General Delivery," if not addressed to a street and number or some

active set to a street and fillinear or some other designated place of delivery.

All matter concerning lotteries, gift concerts, or schemes devised to defraud the public, or for the purpose of obtaining money under false pretences, is denied transmission in the United States mails.

The above rates, rules, and suggestions apply to postal matters in the United States.

#### Passport Regulations.

Citizens of this country going abroad should provide themselves with passports, which are still required on the Franco-Spanish frontier, and are likely to be useful at any time in other parts of the Old World. A single passport is sufficient for a family party consisting of parents, children, and servants; others must procure separate passports. They are obtained only from the Department of State at Washington, upon application enclosing \$5 and proof of citizenship in the United States. If the applicant procure his own passport, not employing an agent or attorney, he may address the Department, "Passport Division," stating whether it is for a native or naturalized citizen, and procure a blank form of application without cost. This provides for a description of the applicant's person, including particulars of age, stature, forehead, eyes, nose, mouth, chin, hair, complexion, and face. If his wife, minor children, and servants, or any of them, accompany him, only their names, ages and relationship to him need be given. If he is native here, his affidavit must be enclosed, showing his age and place of birth, and if born abroad, but child of a father born in the United States, it must state the latter fact, and that the father had resided here, and at the time of applicant's birth was still a citizen of this country. This

must be supported by the affidavit of another citizen knowing the facts, as must the affidavit that does not contain this recital. The affidavits should be attested by a notary public under his signature and official seal, or in his absence by a justice of the peace or other officer administering oaths for general purposes. If he have no seal of office, the certificate of a court of record to his official character must be appended. If the applicant is a naturalized citizen, his certificate of naturalization should be enclosed, which will be returned; and his affidavit must show that he is the identical person named in it. Passports are not irsued to aliens, even when they have declared their intention to become citizens. The wife or widow of a naturalized citizen should enclose her husband's certificate, and swear that she is the wife or widow of the person it describes. Similarly in the case of children claiming citizenship through their father's naturalization while they were still minors, which their affidavit must show. In all cases the oath of allegiance to the United States is required, for which a form will be sent. The check or money order enclosed for the \$5 fee should be made pavable to the Disbursing Clerk of the State Department. If a personal check is enclosed, it must be certified by the bankupon which it is drawa.

A passport is good for only two years from its date. A new one may be had at any time by giving date and number of the old one, and enclosing another fee of \$5 and sufficient evidence that the applicant is in this country at the time of application. If in a foreign country, one can procure a

passport only through the Minister or other diplomatic representative of the United States to that country, or in his absence through the Consul-General, if any, or finally through a Consul. Professional titles are not inserted in passports.

#### Naturalization.

The several States confer the right to vote within their borders, but only the General Government has the power of naturaliza-tion. About one-half of the States allow only native born or naturalized citizens to vote; the rest admit aliens who have form-ally declared their intention to become citizens. In Minnesota they may vote four months after landing, if they then at once declared their intention of citizenship. But full naturalization, after the required five years' residence, does not confer the right to vote in any State, unless the laws of that State admit him to citizenship.

The Federal laws for naturalization are uniform, however, for the whole country. An alien desiring to be naturalized must de-clare upon oath before a circuit or district court of the United States, or a district or supreme court of the Territories, or a court of record of any of the States having comof record of any of the states having com-mon-law jurisdiction, and a seal and clerk, two years at least prior to his admission, that it is bona fide his intention to become a citizen of the United States, and to renounce forever all allegiance and fidelity to any foreign prince or State, and particularly to the one of which he may be at the time a citizen or sul ject.

At the time of his application to be admitted he must declare on oath, before some one of the courts specified, "that he will support the Constitution of the United States, and that he absolutely and entirely renounces and abjures all allegiance and fidelity to every foreign prince, potentate, State, or sovereignty, and particularly, by source, or sovereignty, and particularly, by name, to the prince, potentate, State, or sovereignty of which he was before a citi-zen or subject," which proceedings must be recorded by the clerk of the court.

If it shall appear to the satisfaction of the

court to which the alien has applied that he has resided continuously within the United States for at least five years, and within the State or Territory where such court is at the time held, one year at least, and that during that time "he has behaved as a man of good moral character, attached to the

principles of the Constitution of the United State , and well disposed to the good order and happiness of the same," he will be admitted to citizenship.

If the applicant has borne any hereditary title or order of nobility, he must make an express renunciation of the same at the time

of his application.

Any alien of the age of twenty-one years and upward, who has been in the armies of the United States and honorably discharged therefrom, may become a citizen on his petition, without any previous declaration of his intention, provided that he has resided in the United States at least one year previous to his application, and is of good moral character.

Any alien under the age of twenty-one years who has resided in the United S ates three years next preceding his arriving at that age, and who has continued to reside therein to the time he may make applica-tion to be admitted a citizen thereof, may, after he arrives at the age of twenty-one years, and after he has resided five years within the United States, including the three years of his minority, be admitted a citizen; but he must make a declaration on oath and prove to the satisfaction of the court that for two years next preceding it has been his intention to become a citizen.

The children of persons who have been duly naturalized, being under the age of sixteen years at the time of the naturalization of their parents, shall, if dwelling in the United States, be considered as citizens. The children of persons who now are or have been citizens of the Un ted States are, though born out of the limits and jurisdic-tion of the United States, considered as citizens thereof.

The naturalization laws are contained in Sections 2165-74, U. S. Revised Statutes. Section 2000 declares that "all naturalized citizens of the United States while in foreign countries are entitled to and shall receive from this government the same pro-tection of persons and property which is accorded to native-born citizens."

Voters in Michigan.

Article VII., Section 1, of the State Constitution prescribes the qualifications of voters in this State, as follows:

"In all elections every male citizen, every male inhabitant residing in the State on the twenty-fourth day of June, one thousand eight hundred and thirty-five, every male inhabitant residing in the State on the first day of January, one thousand eight hundred and fifty, who has declared his intention to become a citizen of the United States, pursuant to the laws thereof, six months pre-ceding an election, or who has resided in this State two years and six months and declared his intention as aforesaid, and every civilized male inhabitant of Indian descent, a native of the United States, and not a member of any tribe, shall be an elector and entitled to vote; but no citizen or in-habitant shall be an elector, or entitled to vote at any election, unless he shall be bove the age of twenty-one years and has resided in this State three months and in the township or ward in which he offers to vote ten days next preceding such election.

Provided, That in time of war, insurrection, or rebellion, no qualified elector in the actual military service of the United States, or of this State, in the army or navy thereof, shall be deprived of his vote by reason of his absence from the township, ward, or State, in which he resides; and the Legislature shall have the power and shall provide the manner in which, and the time and place at which, such absent electors may vote, and for the canvass and return of their votes to the township or ward election district in which they respectively reside, or otherwise.'

A recent Supreme Court decision compels registration and voting by non-householders in the township or ward where they get

their meals.

#### How to Get a Patent.

As in the case of naturalization, only the United States Government has the power to issue patents. They are granted by the Patent Office, upon proper application and proof of originality and utility, to any person, whether citizen or alien, who has invented or discovered a new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned; and by any person who, by his own industry, genius, efforts, and expense has invented and produced a new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief, a new and original design for the printing of woolen, silk, cotton, or other fabrics; any new and original design for the printing, of worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture; the same not having been known nor used by others before his invention or production thereof, nor patented or described in any printed publication, upon payment of the fees required by law and other due proceedings had.

A patent confers upon the patentee, his heirs and assigns, the exclusive right to make, use, and sell his invention or discovery in any part of the United States, for the period of 17 years. Extensions of this time are frequently made by act of Congress; and the Patent Office will make a reissue to the patentee or his legal representatives, upon proof that a specification in the original claim was insufficient or defective, or that the patent is invalid or inoperative because the applicant claimed more than was original or new, if his error arose, as often happens, from inadvertence, mistake, or accident, and not from an intention to decive and defraud. When a patent was issued and assigned before July 8, 1870, application for reissue may be made by assignes; if since that date, the inventor himself must make the proper application and affidavit, if he is living. Assignment may be made in writing of a patent or any interest in one; and an assignee, as well as the original patentee or his representatives, may grant exclusive rights under a patent for the whole or-any part of the United States. The instrument of assignment must be recorded in the Patent Office.

An inventor is not refused a patent if it is found that his device or discovery, or any part of it, had been known or used in a foreign country, if it had not been patented or described in print before his application, and he believed himself to be the original inventor or discoverer. Joint inventors take a joint patent, they cannot each have one. On the other hand, inventors of separate improvements in the same machine cannot take a joint patent for their several inventions. If the inventor is associated with another who furnishes capital for their partnership in an invention, they may become joint patentees, though not allowed to apply as joint inventors. An inventor is not debarred by his letters patent from a foreign government, from obtaining a patent in the country, if his invention has not

4 4

come into public use here more than two years before his application. His American patent, however, will be limited in time to the life of his foreign one; or, if he has more than one, the shortest unexpired term among them will govern the duration of his patent here. In no case will it exceed the regular limit of 17 years,

An application for a patent is made to the An application for a patent is made to the Commissioner of Patents, at Washington, and must be written, or part written and part printed. The applicant makes oath that he verily believes himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he asks a patent, and that he does not know or believe that the same was ever before known or used, and he shall state of what country he is a citizen. The oath may be taken before any person in the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, charge de affaires, consul, or com-mercial agent, holding commission under the Government of the United States, or before any notary of the foreign country in which the applicant may be. A full de-scription of the invention must be filed, and of the process of making, constructing, or compounding, and of using it, in terms so full, clear, concise, and nearly exact, that any person skilled in the science or art to which it pertains, or most pertains, may similarly make and use it. If it is a ma-chine, its principle must be explained also the best method which the inventor contemplates of applying the principle, so that the new device may be plainly distinguished from other inventions. He must particularly indicate and base his claim upon that part, combination, or improvement which he holds to be his own invention or discovery. If drawings illustrate it further, he must furnish one copy, signed by him or his at-torney, with two witnesses; and if it can be represented by a model, he must supply one of convenient size, if requested by the Commissioner. The application, including the claim and specification, must be signed by the inventor and two witnesses.

A "caveat" is notice to the Patent Office

A "caveat" is notice to the Patent Office of claim as inventor to bar another patent for the same invention for one year, without notice to the caveator. It must specify the object and specialties of his invention, and ask protection of his right until his application is filed; must be limited to one invention or improvement, include a drawing if practicable, and be duly signed and sworn to. An alien may file a caveat, if he has lived in this country during the next preceding year, and declared his intention of citizenship.

Fees must be paid as follow: Application, \$15: issue of patent, \$20—on designs, for 314 years \$10; for 7 years \$15, for 14 years \$30; caveat, \$10; reissue of patent, \$30; disclaimer, \$10; copies of patent, etc., ten cents per 100 words; recording assignments or other papers of 300 words or less, \$1; 300 to 1000, \$2; over 1000, \$8.

The business of the Patent Office at Washington is far the largest of any similar bureau in the world, and is almost wholly of modern growth. From 1840 to 1850 but 5041 patents were issued from it: 1850-60, 21,428; 1860-70, 77,315; 1870-80, 140,375—a general rate of increase sixfold that of our population.

#### The Copyright Law.

Any citizen or resident of the United States may protect by copyright his interest in any book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or any painting, drawing, chromo, statue or statuary, and models or designs to be perfected as works of fine art, of his authorship, device, or ownership. If a dramatic composition, he ownership. It a dramatic composition, ne may similarly control its public performance. Copyrights are procured of the Librarian of Congress, who may be informally addressed at Washington, D. C., without affidavit. The name and residence of the applicant should be stated, and whether he claims as author, designer, or proprietor. In case of a book or other publication having a title-page a copy of this page should be enclosed, or the printed title of anything else having such title. A description of any other production entitled to copyright is sufficient. A title or title-page may be in different type from that in which it will dinally appear; and the print of a type-writer will do, if on paper at least as large as commercial note. Titles of periodicals to be copyrighted must give number and

Application for copyright must be made before publication. The copyright is com-monly granted as of course, without hindrance or delay, and without charge, except a fee of fifty cents for recording it and for each copy of the record or certificate of copyright. If the right should be assigned, the instrument of assignment must be recorded in the Librarian's office, at a cost of \$1, and as much for a certified copy of it. Every copy of a copyrighted book must

contain upon the title-page or the next following one, and other productions some-where upon them, a notice in these words: "Entered according to act of Congress, in the year —, by —, in the office of the Librarian of Congress, at Washington "; or simply these, "Copyrighted, — [the year], by ——." The latter form is now commonly used. The word "by" should not be omitted in either case. If an author desires on the distribution of the control o case, "All rights reserved, and notify the Librarian of such addition. Using a notice of copyright, or equivalent words, without obtaining copyright, subjects the offender to a fine of \$100.

Within ten days after publication of a book, two copies of the best edition must be sent to the Librarian of Congress, postage or expressage prepaid, or under labels which he will send, that will carry them free through the mails. Neglect to send nullifies the copyright, and renders the responsible person liable to a fine of \$25.

A copyright runs for twenty-eight years. Six months before that term expires application for renewal may be made by the original applicant, or, in case of his death, by his widow or children, accompanied by a full statement of authorship or relationship, and the date and place of entry of the original copyright. Newspaper advertisement of renewal must be made for four weeks, within two months of date of issue of the

renewal certificate. A renewal is for the period of seventeen years,

Ö

80

Internal Rev	enue Taxes.
Internal Rev  Ale, per bbl. of 31 gallons	Malt liquor dealers (retail). 20 (Manufacturers of stills
	pint and not more than a quart
manufact acaters (wholesale) 50 001	than one pint, per bottle

#### The Civil Service System.

January 16, 1883, an act of Congress was passed "to regulate and improve the civil service of the United States," to which some amendments have been made. Its purpose is declared in the act to be "for open, com-petitive examinations for testing the fitness of applicants for the public service, now classified, or to be classified hereafter. Such examinations shall be practical in their character, and so far as may be shall relate to those matters which will fairly test the relative capacity and fitness of the persons examined to discharge the duties of the service into which they seek to be ap-pointed;" also, "There shall be non-compointed; also, There shall be non-competitive examinations in all proper cases before the commission, when competent persons do not compete, after notice has been given of the vacancy." Under this law a Civil Service Commission of three persons, also a Chief Examiner and a Section of the property and a second that the president and the second that the president and the second that the second tha retary, are appointed by the President; and they execute the law and the regulations prescribed by or under it. The central prescribed by or under it. The central office of the Commission is at Washington, but they appoint Examining Boards, each of three resident officers of the United States, for that city and for each State and

Territory where examinations occur.
The act establishes three branches of the Civil Service: 1. The Classified Departmental Service, embracing all places in the departments of the Government at Washington, which pay salaries of \$720 a year or more. 2. The Classified Customs Service more. 2. The Classified Customs Service in customs districts having 50 or more officers, and embracing all places paying at least \$900 a year, when the appointee is not confirm d by the Senate. 3. The Classified Postal Service, including all places above laborer's grade, in post-offices with at least 50 employees. In the Departmental Service examinations are held only for the Department. examinations are held only for the Department of State, the Patent, Pension, and Signal Bureaus, the Geological Survey, and some other minor offices. When special technical qualifications are required, special examinations are made. Confidential clerks of heads of departments or offices, cashiers of collectors and postmasters, superintendents of money-order divisions in post-offices, custodians of money for whose fidelity another officer is under bond, disbursing officers who give bonds, persons in the se-cret service, translators, interpreters, stenographers, persons whose employment is exclusively professional, and chief clerks, deputy collectors, and superintendents and chiefs of divisions or bureaus; also officers confirmed by the Senate, laborers, and work-

men, are not under the provisions of the act.
Applicants for examination with a view to appointment in the Civil Service of the United States must be citizens of proper age (18 to 45 in the Departmental and Cus-toms, 16 to 35 in the Postal Service, except

messengers, stampers, and other junior assistants in the last, who are to be at least assistants in the last, who are to be at least, and nust give proof of meutal and physical sufficiency. The limitations of age, however, do not apply to soldiers and sailors of the Union honorably discharged, nor to any person taking special examination for a place requiring peculiar information or technical skill. No sex, color, political or religious opinion, bars an applicant. Application must be made uron a hlank which reugious opinion, bars an applicant. Application must be made upon a blank, which for the Departmental Service may be had of the Secretary of the Commission, at Washington; for other services, of the Secretary of the State or Territorial Examining Board, at the office where appointment is sought—in Michigan only Detroit for the Postal, and Detroit and Port Huron for the Customs Service. The blank, when filled and signed is returned to the same office. and signed, is returned to the same office.

General examinations are required only in the Customs and Departmental Services for clerkships of \$1000 and upward, requiring no special information or skill, and are limited to the following subjects: 1, Orthography, penmanship, and copying; 2, Arithmetic—fundamental rules, fractions, and percentage; 3, Interest, discount, elements of book-keeping and accounts; 4, Elements of the English language, letter-writing, and the proper construction of sentences; 5, Elements of geography, history, and the government of the United States. For places in which less education will suffice se for employ in the post-offices. States. For places in which less education will suffice, as for employ in the post-offices and those below the grade of clerks in custom houses and in the departments, the commission limits the examination to less than these five subjects, omitting the third and parts of the fourth and fifth; this is known as the limited examination. No one known as the limited examination. No one will be certified for appointment whose standing upon a just grading in the general or limited examination is less than 65 per cent of complete proficiency in the three first subjects. Competitive examinations to test the fitness of persons in the service for promotion therein, are also provided. Those who pass the examination are graded and registered, and the Commission gives a certificate to the person, stating the grade which he has attained on examination and his proficiency in the several subjects, as shown by the markings.

In the matter of appointments, when a vacancy occurs the appointing officer applies to the Commission or Examining Board, and is given the names of four applicated blobbyt and including the control of the part of the control of the cants of highest standing in his branch of service who remain eligible; from these a selection must be made. The appointment, however, is probationary for six months, after which it may be revoked or made absolute, upon satisfactory evidence of conduct and ability in the office.

#### The Public Lands.

Two classes of public lands are still open to settlement upon purchase—those sold for \$1.25 per acre as the minimum price, and the others at \$2.50, being in the alternate sections reserved by the Government upon making land-grants to railroads and for

and cultivates it for five years. If he be an honorably discharged soldier or sailor from our army or navy, the time of his service may be deducted from this period. The Timber Culture Law grants a settler a free patent for his land at the end of eight other public improvements. Citizens of the patent for his land at the end of eight other public improvements. Citizens of the cares. United States of full age, or heads of families, may settle upon an unsold quarter section, or tract of 160 acres, and thus acquire the right of pre-emption, or of prior claim to purchase. The Homestead Law gives a similar tract of \$1.25 land, or \$0 acres at \$3.50 to an actual settler who resides upon Marriage Laws.

The ages at which license to marry is granted are 21 years for men in Alabama, Arkansas, California, Connecticut, Florida, Illinois, Indiana, Kentucky, Louisiana, Illinois, Indiana, Kentucky, Louiseata Maine, Massachusetts, Michigan, Minnesota Missauri Nebraska, North Mississippi. Missouri, Neuraska, North Carolina, Ohio, Pennsylvania, Texas, Vermont, Virginia, West Virginia, and Wyoming; and 18 years for females (without consent of parents) in the same, except Connecticut, Florida, Kenrucky, Louisiana, North Carolina, Pennsylvana, Virginia, and West Virgina, where it is 21 years. Thirteen other States and Territories (37 in all) receive lights where the control of the states and the control of the states and the states of the quire license, but do not limit ages

The degrees of relationship within which marriage is prohibited are lineal ances-tors and descendants, brothers, sisters, nephews, and nieces in all the States and Territories except New York and Louisiana, which do not prevent nephews and nieces. and Florida and Georgia, which simply bar marriage "within the Levitical debar marriage "within The marriage of first cousins is also

prohibited in Arkansas, Dakota, Indiana, Kansas, Montana, Nevada, New Hampshire, Ohio, Washington Territory, and Wyoming, A marriage is voidable at the option of either of the parties, if contracted under age of consent and no cohabitation has occurred after age was attained, or if either party is luiotic or insane, in Arizona, California, (which adds impotence), Minnesota, Nebraska, Nevada, Oregon, Washington, Nebraska, Nevada, Oregon, Washington, and Wisconsin. Connecticut, Dakota, Mich-igan, New York, and Utah, the same as Cal-ifornia. Arkansas and Idaho include all under age of consent, the insane, idiotic, and impotent, and where consent was obtained by force. Delaware allows only the insane by force. or idiotic to nullify a marriage; Indiana, Iowa, Kansas, and Wyoming, the same, and those under age of consent; Kentucky, consent obtained by fraud or force, and those under the age of consent, if no cohabitation after age; Louisiana, the former only, if no cohabitation before suit is brought to break commonation before suit is orough to break the marriage; South Carolina, the former, if marriage not consummated; New Mexico, under age of consent only; Texas, physical incapacity; Virginia, if within the prohib-ited degrees, insane, idiotic, or impotent; West Virginia, the same, also if under age of consent, or a white person married to a negro while a former spouse is living. Other States and Territories have no provisions on the subject.

without action of the parties, if within the prohibited degrees or either is of negro blood and the other a white. In Arizona, the same, also bigamous marriages and of the same, also organious manager age of consent, or of white with one of Indian or Mongolian blood, for force or fraud, or sentence to imprisonment for life. Georgia names the prohibited degrees, bigamous, insame at marriage, impotent, white with negro blood, force or fraud. Arkansa volds marriages within prohibited degrees bigamous, under age of consent, and of white with negro blood. California the same of mitting age of consent. white with omitting age of consent; and so ado, Delaware, Indiana (also if Colorado, Delaware, Indiana (also in insane when married), Maryland, Mississippi, and Missouri. Nebraska holds Colorado. pi, and Missouri same as Indiana. Connecticut and kansas proscribe only the prohibited degrees; Dakota, Idaho, Iowa, Montana, New Hampshire, Ohio, Pennsylvania, and Vermont, simply add bigamous marriages; to both of these Kentucky adds

In Alabama marriages are altogether vold,

impotent, white with negro; Maine and Illinois add the insane when married and imprisonment for life; Massachusetts, under age of consent and no cohabitation, insane when married; Michigan the same, also imprisonment for life, and force or fraud; Wyoming, as Michigan, except imprisonment; Minnesota, same as Dakota and ment; Minnesota, same as Dakofa and others, and under age of consent; New Mexico the same, but without cohabitation; Nevada adds to the Dakota prescriptions white with negro blood, Indian or Mongolian; New York, imprisonment for life; North Carolina, under age of consent, insane when matried, impotent, white with negro or Indian; Rhode Island, insane when married; and Wisconsin the same, also life imprisonment. Bigamous unions only are void in Louisians; bigamous and impotent in New Jersey; bigamous and of whites with negroes in Florida; same, but including Mongolians, in Oregon; bigamous, insane Mengolians, in Oregon; bigamous, insane when married, and white with negro or Indian in South Carolina; same in Ten-nessee, except Indian; Virginia, bigamy, nessee, except Indian; Virginia, bigamy under age of consent without cohabitation uuder age of consent without cohabitation, white with negro, insane when married, and impotent. Texas omits bigamous, and prescribes under age of consent, impotent, white with negro. West Virginia, Washington and Ulah Territories, and the District of Columbia, do not expressly provide for void marriages; and the two last, with Florida, Georgia, Illinois, Maine, Maryland, Massachusetts, Mississippi, Missouri, Moctana, New Hampshire, New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island and Tennessee, not for voidable marand Tennessee, not for voidable mar-

The legal age of consent to marriage is for males and females, respectively, 14 and for males and females, respectively, 14 and 12 (as under common law, there being no statutory prescription) in Arizona, Colorado, Connecticut, Delaware, District of Columbia, Florida, Kansas, Maine, Maryland, Massachusetts, Mississippi, Missouri, New Jersey, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, and Vermont; same ages by statute in Kentucky, Virginia, and West Virginia; 16 and 14 in Iowa, Louisiana, New Hampshire, and Texas; 17 and 14 in Alabama, Arkansas, Georgia, and Illinois; 18 and 15 in California, Dakota, Minnesota, New Mexico, Oregon, and Wisconsin; 18 and 16 in Idaho, Indians, Michigan, Nebraska, Nevada, Ohio, and Wyoming; Montana and Washington Territories, 21 and 18; New York, 21 and 14. Missouri allows marriage simply upon agreement of parties, followed by cohabitants.

agreement of parties, followed by cohabita-tion; California upon consent, and assumption of marital relations.

tion of marital relations.

The age of consent by girls to illicit intercourse, without undeniable presumption of violence, is only 7 years in Delaware; 10 in Alabama, California, Florida, Georgia, North and South Carolina, Texas, District of Columbia, Maryland, Minnesota, Wyoming, Arkansas, Utah, Montana, Arizona, and Rhode Island; 11 in Vermont; 12 in Missouri, Indiana, Nevada, Virginia, West Virginia, and Idaho; 13 in Massachusetts, Iowa, and Maine; 14 in Illinois, Dakota, Connecticut, New Hampshire, Oregon, Ohio, Wisconsin, New Hampshire, Oregon, Ohio, Wisconsin, New Mexico, and Michigan (raised from 10 in 1887); 15 in Nebraska; 16 in Pennsylvania, Kentucky, New York, New Jersey, and Washington; and 18 in Mississippi, Colorado,

ew Hampshire, Ohio, Pennsylvania, and Vermont, simply add bigamous marges; to both of these Kentucky add. Here it is had from the county clerk, on der age of consent, insane when married, payment of a small fee.

#### Divorce Laws.

All the States and Territories have laws allowing divorce from the marriage con-tract, except South Carolina and New Mexico, and in all but these infidelity, or viola-tion of the marital vow, is a sufficient ground for absolute divorce. Other causes are as follow: Impotence, or physical in-ability, in all the States except California, ability, in all the States except California, Connecticut, Dakota, Iowa, Louisiana, New Mexico, New York, South Carolina, Texas and Vermont. In most of these it renders marriage voidable. Wilful desertion for one year, in Arkansas, California, Colorado, Dakota, Florida, Idaho, Kansas, Kentucky, Misouri, Montana, Nevada, Utah, Wisconsin, Washington, and Wyoming; two years, in Alabama, Arizona, Illinois, Indiana, Iowa, Michigan, Mississippi, Nebraska, Pennsylvania, and Tennessee; three years, in Connecticut, Delaware, Georgia, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ohio, Oregon, Texas, Vermont, and West Virginia; five years, in Virginia and Rhode Island, though the court may in the latter State decree years, in virginia and raduce island, though the court may in the latter State decree divorce for a shorter period. Habitual drunkenness, in all States and Territories except Maryland, New Jersey, New York, North Carolina, Pennsylvania, South Car-olina, Texas, Vermont, Virginia, and West onna, rexas, vermont, virginia, and West Virginia. Imprisonment for felony, or con-viction of felony in all with sundry limita-tions) except Dakota, Florida, Maine, Mary-land, New Jersey, New Mexico, New York, North Carolina, South Carolina, and Utah. Cruel and abusive or inhuman treatment, Cruel and abusive or inhuman treatment, intolerable, extreme, or repeated cruelty, as variously prescribed, in all except New Jersey, New Mexico, New York, North Carolina, South Carolina, Virginia, and West Virginia. Failure by the husband to provide, one year in California, Colorado, Dakota, Nevada, and Wyoming; two years in Indiana and Idaho; no time specified in Arizona, Idaho, Massachusetts, Michigan, Maine, Nebraska, Rhode Island, Vermout, and Wisconsin; wilful neglect for three years, in Delaware. Fraud and fraudulent contract in Arizona, Connecticut, Georgia, Idaho, Kansas, Kentucky, Ohio, Pennsylvania, and Washington. Absence without being heard from three years in New being heard from, three years in New Hampshire; seven years in Connecticut and Vermont; separation five years, in Kenvermont; separation nve years, in Kentucky; voluntary separation, five years, in Wisconsin. When reasonably presumed dead by the court, in Rhode Island. Ungovernable temper, in Kentucky; habitual indulgence in violent and ungovernable temper, in Florida; cruel treatment, outrages or excesses as to render their living tegether insupportable, in Arkanas Kenremper, in Fibrua, crue treathent out rages or excesses as to render their living together insupportable, in Arkansas, Kenucky, Louisiana, Missouri, Tennessee, and Texas; such indignities as to render life burdensome, in Missouri, Oregon, Pennsylvania, Tennessee, Washington, and Wyoming; husband notoriously immoral before marriage, unknown to wife, in West Virginia; fugitive from justice, in Virginia; gross mischavior or wickedness, in Rhode Island; any gross neglect of duty, in Kansav and Ohio; attempt on life, in Illinois; refusal of wife to remove into the state, in Tennessee; mental incapacity at time of marriage, in Georgia; three years with any religious society that believes the marriage enlation unlawful, in Massachusetts; joining any religious sect that believes marriage un any religious sect that believes marriage unlawful, and refusing to cohabit six months, in New Hampshire; parties cannot live in peace and union, Utah; settled aversion, which tends to permanently destroy all peace and

happiness, in Kentucky. All these, and others before mentioned, are for full or absolute divorce. Collusion or connivance with a view to divorce, and condonation of infidelity to the vow, are in all cases provided against. In Georgia an absolute divorce is granted only after the concurrent verdict of two juries, at different terms of the court. In New York absolute divorce is granted but for one cause, adultery.

adultery.

Connecticut, Illinois, Kentucky, and Missouri make no restriction upon marriage of divorced persons. Either party may remarry, but in Massachusetts defendant must wait two years, and then obtain permission from the court. A decree of the court may restrain the guilty party from remarrying in Virginia. Parties cannot remarry until after two years, except by permission of the court, in Maine. In New York plaintiff may remarry, but defendant cannot do so during the former's lifetime, unless the decree be modified or proof is given that five years have elapsed and that complainant has married again and defendant's conduct has been uniformly good. Any violation of this is punished as bigamy, even though the other party has been married. In Delaware, Pennsylvania, and Tennessee, no wife or husband divorced for violation of the marriage vow can marry the partner of the crime during the life of the former husband or wife, nor in Louisiana at any time; such marriage in Louisiana makes the person divorced guilty of bigamy.

bigamy.

In order to bring suit for divorce, previous residence is required, in Dakota, of ninety days; California, Indiana, Idaho, Nebraska, Newada, New Mexico, Texas, and Wyoming, six months; Alabama, Arizona, Arkansas, Colorado, Illinois, Iowa, Kansas, Kentucky. Maine, Minnesota, Mississippi, Michigan, Missouri, Montana, New Hampshire, Ohio. Oregon, Pehnsylvania, Utah, Vermont toth parties as husband and wife), West Virginia, Washington, and Wisconsin, one year; Florida, Maryland, North Carolina, Rhode Island, and Tennessee, two years; Connecticut and Massachusetts (if, when married, both parties were residents; otherwise five years, three years.

wise five years, three years.
Courts in all the States, especially in New York, are exceedingly jealous as to their jurisdiction, and usually decline to recognize the validity of a divorce granted against the citizen of a state in which the court has jurisdiction, by the court of another state, unless both parties to the suit were subject at the time to the jurisdiction of the court granting the divorce. Kansas courts grant divorces if the applicant's husband or wife has obtained a divorce in another State and the applicant has been forbidden to remarry. If a wife in New York obtains a divorce, and the husband is forbidden to remarry, he may go to Kansas and obtain a divorce on that ground. If his wife contests the case, or can be served with the papers in Kansas, so that she is brought under the jurisdiction of the Kansas court, the courts of New York must recognize the divorce as valid, and cannot punish the husband for remarrying in New York. The latter State permits a sort of polygamy and polyandry in certain cases. Desertion for five years, without knowledge that the deserter is living, permits the one deserted to marry again; and the second marriage is valid, though the deserter returns.

#### Liquor Legislation.

Only six States now retain laws for the prohibition of the liquor traffic within their limits, — Maine, New Hampshire, Vermont, Rhode Island, Iowa, and Kansas, Maine took the initiative with a report from a legislative committee, as long ago as 1837, that the license laws should be repealed and a prohibitory act passed. Like reports were made the next year to the legislatures of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Tennessee; but the first prohibitory law was not passed until 1846, in Maine. It was repealed ten years after, but a new one passed in 1858, which is still in force, with various changes and amendments. Prohibition has also been incorporated in the State Constitution. The people of New Hampshire adopted a similar law by a three-fourths vote in 1849, and is yet under another law of the kind passed in 1855. The present law of Vermont dates from 1852. Rhode Island had various prohibitory enactments from that year until 1887, when the existing ironclad statute was passed. Iowa enacted a prohibitory law in 1855, which became inoperative. In 1882 her people voted in favor of prohibition bit still in force. Kansas has had a prohibitory law since 1866, and a constitutional amendment to similar effect since 1880.

aince 1880.

Attempts have been made in many other States to enforce prohibitory liquor laws. Delaware enacted one in 1847, which failed the next year for unconstitutionality. Michigan inserted in the State constitution of 1850 a clause prohibiting the grant of licenses to sell liquor. A prohibitory law was enacted in 1833, but declared unconstitutional the next year, and another passed in 1855. Twenty years afterwards it gave place to the present tax or modified license system. The legislature of 1887 passed a local-option act, under which thirty-six counties voted in favor of prohibition, when the law was declared unconstitutional by the Supreme Court, from a defective title. A constitutional amendment expressly

requiring prohibitory legislation was defeated in April, 1887, by a majority of 5941. Minnesota in 1832 passed a prohibitory law which has given place to the local-option and high-license system. Massachusetts has had numerous laws and amendments for prohibition from that year until recent years, when a local-option law gives prohibition to about half the towns of the State. New York had prohibitory laws in 1853 and 1855. The first was vetoed, the second declared unconstitutional. Connecticut's law dated from 1854, but has given way to the local-option plan for towns. Indiana passed one in 1855, which divided the Supreme Court evenly on a constitutional question, and although this left the law in being, it soon became a dead letter. Nebraska had prohibition upon her statute book from 1855 to 1890; and Illinos attempted it in a former year, by a law which was not sustained by popular vote. In 1887 prohibitory constitutional amendments were defeated in Michigan, Oregon, Tennessee, and Texas.

Besides the States named as under local option, most of the Southern States — Alama. Arkansas, Georgia, Kentucky, Louis-

Besides the States named as under local option, most of the Southern States—Alabama, Arkansas, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Bouth Carolina, Tennessee, Texas, Virginia, and West Virginia—have adopted the plan, under which notably successful results are reported, particularly in Georgia. Illinois had a local-option law as early as 1839, followed by several other States during the next eight years. Dakota has a local-option law.

option law.

High license prevails in Illinois, Pennsylvania, and Minnesota, and the other States are generally under some sort of license system. Most of the States have laws restricting sales on Sunday and to minors, and in regard to hours of closing saloons and other regulations of the traffic. Thirty-six of the States and Territories now have laws requiring in the public schools scientific temperance teaching, or instruction in the effects of stimulants and narcotics upon the human system.

#### Drinks of all Nations.

The following table exhibits at a glance the beverages of all nations:

	MIL	ol, Gal- per in-		
Countries.	Wine.	Beer.	Spirits.	Alcohol, ( lons per habitan
Great Britain	15	1007	37	1.92
France	760	190	76	2.65
Germany	120	880	60	1.60
Russia	30	63	145	1.05
Austria	300	245	30	1.45
Italy	480	20	10	
Spain	220		3	1.48
Portugal	60		1	1.55
Holland	3		12	
Denmark	.1	25	8	2.60
Belgium	4	170	10	2.07
Norway and Sweden	2	35	27	2.27
British Colonies	108	81	20	1.80
United States	30	440	76	1.31
Total	2133	3194	473	1.70

Lager beer is commonly known as a German beverage, but in three countries of the world there is more beer drunk per capita than in Germany. The number of gallons drunk annually per person is: United States, 33; Belgium, 32; Great Britain, 22; Germany, 12; Denmark, 10½; Holland, 9; Austria, 7½; France, 4½; and Russia, 0½. Belgium is the greatest brewing country in the world, producing annually 1,050,000,000 gallons; Great Britain, 900,000,000; Denmark, 513,192,190; Germany, 30,000,000; and the United States, 18,000,000.

The usual percentage of alcohol, by vol-

the United States, 18,000,000.

The usual percentage of alcohol, by volume, in the various drinks is about as follows: Beer 4, porter 4.5, ale 7.4, cider 8.6, perry 8.8. Wines-Elder 9.3, Moselle 9.6, Tokay 10.2, Rhine 11, orange 11.2, Bordeaux 11.5, hock 11.6, gooseberry 11.8, champagne 12.2, claret 13.8, Burgundy 18.6, California 14.5, Malaga 17.3, Canary 18.8, sherry and Vermouth 19, Malmsey 19.7, Marsala 20.2, Madeira 21, port 23.2, Curacoa 27, Aniseed 38, Marsachino 34, Chartreuse 43, gin 51.6, brandy 53.4, rum 53.7. Whiskey—Irish 53.9, Bourbon 54, rye 54, Scotch 54.3. "Proof spirit" contains 49.24 per cent of absolute alcohol by weight, or 57.06 in volume.

#### The Michigan Liquor Law.

of a few sections being summarized:

Section 1 prescribes taxation upon the SECTION 1 prescribes taxation upon the traffic in spirituous or malt liquors as follows: Selling spirituous or mixed liquors and brewed or malt liquors at retail, \$500; brewed or malt liquors at retail, \$500; spirituous liquors at wholesale or retail, \$900; spirituous liquors at wholesale and retail, \$900; manufacturing brewed or malt liquors, \$65; manufacturing spirituous liquors, \$500. No presson paying a tax on spirituous or intoxiperson paying a tax on spirituous or intoxi-cating liquors shall be liable to tax on malt, brewed, or fermented liquors. No person paying a manufacturer's tax on brewed or malt liquors shall pay a wholesale dealer's

tax. SEC. 2 defines retail dealers to be those who sell liquors by the drink and in quantities of three gallons or less. No tax is required for selling wine or cider made from fruits grown or gathered in this State, unless it be sold by the drink.

SEC. 3. The penal provisions of the act shall not apply to druggists who sell liquors for chemical, scientific, medicinal, mechanical or gasermental purposes only. Prop.

for chemical, scientific, medicinal, mechanical, or sacramental purposes only. Druggists may not sell any kind of liquors to minors except for medicinal or mechanical purposes, and then only on the written order of the parent or guardian of such minor; nor may they sell to any adult person who is intoxicated, or in the habit of getting intoxicated, nor to any Indian, nor to any person when forbidden in writing so to do by the husband, wife, parent, child, guardian, or employer of such persons, or by the supervisor of the township or mayor, or director of the poor, or any supervisor or alderman of the city, or president or trustee of any village, or superintendent of the poor of the county in which such person shall of the county in which such person shall of the colony in which such person same reside or temporarily remain, nor to any other person to be used as a beverage, nor to be drank on the premises, nor to be mixed and drank with a beverage drawn from any soda fountain or other apparatus or device for dispensing aerated or other beverages; but such druggists shall be allowed to sell said liquors for medicinal, chemical, scientific, mechanical, and sacramental purposes only, without the payment of any tax specionly, without the payment of any tax speci-fied in section one, and subject to these con-ditions: Every druggist shall keep a blank book in which shall be recorded the names of all persons applying for liquor, the date of each sale, the amount and kind of liquor of each sale, the amount and kind of liquor sold to each person, and the purpose to which the same was to be applied, as stated by the purchaser. This book shall be open to all persons for examination during all business hours; and the failure to keep a complete record shall subject such druggist to the penalties provided for in this section. Druggists shall, on or before the first Monday in May in each year, or before commencing business, file with the county treasurer a ound satisfactory to the township urer a bond satisfactory to the township board of the township, or the board of trustees, or the common council of his village or city, in the sum of \$2,000, with two or more sufficient sureties, who shall be freeholders and residents of the county, each of whom shall justify in the sum of \$2,000 over and above all indebtedness, and all exemptions from sale on execution, and all liability on

The destruction of the local eption act of 1887, by decision of the Supreme Court, gives special importance to the act for taxation and regulation of the liquor traffic, passed at the same session of our State Legislature. It is as follows, the provisions is declared a misdemeanor, punchased at the same session of our State than \$500 and cost of prosecution, or implications. 90 days nor more than one year, or both in the discretion of the court; for a second viotation, in addition to the above penalties, the druggist shall be debarred from selling in this State, any liquor for a period of five, years. Every drug clerk shall be subject to the same penalties as proprietors or employers. [The late decision of the Suprement of the State o ployers. [The late decision of the Supreme Court of the State declares unconstitutional all fines and penalties, where they seri-ously impair one's capacity for gaining a livelihood, and break up one's business.]

Sections 4 and 5 specify that the annual tax shall be paid on or before May 1, and that the tax paid by persons commencing business after the beginning of the year shall not be less than half the yearly tax.

SEC. 6. The county treasurer shall give a receipt and shall also deliver a notice, printed on full-size printers' cardboard, which shall contain a statement of what tax has been paid and the penalties for violation. Said notice and receipt shall be kept posted in a conspicuous place in the room where the sale is carried on. And it shall be the duty of sheriffs, marshals, constables and police officers to forthwith close all salcons and other places where the tax has not been paid in full, and in which the receipt shall

not be displayed.

not be displayed.

SEC. 7. Any person who shall engage in any business requiring the payment of a tax under section one of this act, without having executed and delivered the bond required, or who shall violate any of the provisions of the act, shall be deemed guilty of misdameanor and more conviction if a misdemeanor and, upon conviction, if there is no specific penalty provided, shall be punished by a fine of not more than two hundred dollars and costs of prosecution, or by imprisonment in the county jall not less than ten days nor more than ninety days, or both such fine and imprisonment in the discretion of the court. And in case such fine and costs shall not have been paid at the time such imprisonment expires, the person shall be further detained in jail until such fine and costs shall have been fully paid. The whole term of imprisonment shall not exceed six months. And any solon-keeper exceed six months. And any saloon-keeper who, after paying the tax shall be convicted of a violation of any of the provisions of this act, shall thereby, in addition to all other penalties prescribed, forfeit the tax so paid, and be precluded from continuing such business for the remainder of the year for which the tax was paid, and may not start a saloon again or become a surety for one year. Each violation of any of the pro-visions shall constitute a separate offense, and for each violation on the same day, or on different days, the person or persons offending shall be liable to all the penalties and forfeitures herein provided. [The Su-preme Court declares unconstitutional the provisions which allow and direct officers to close places of sale on their own determination of facts, and without process to arrest parties as for a breach of the peace. See also decision, Sec. 3.]
Szo. 8. The bond shall be delivered to the

county treasurer on or before May 1 in each year. The sufficiency of the bond shall be determined by the township board of the township, or the board of trustees, the coun-

cil or the common council of the village or city in which such business is proposed to be carried on. The sum shall not be less than \$3,000 nor more than \$6,000, with two or more sufficient securities, who shall be male residents and freeholders of the township, village or city in which such business is proposed to be carried on, neither of whom shall hold an elective or appointive office in any county, city, village or township of this State, except notaries public, nor be a surety upon more than two liquor bonds and each of whom shall justify in real estate situated in the county in a sum equal to the amount of the bond, over and above all indebtedness, and all exemptions from sale or execution. [Here follows the form of the bond.] There shall also be annexed to each bond an affidavit which shall state that the afflant is not either as principal, agent or servant in the sale of any liquors mentioned in this act, that he is not a surety upon any other bond required, and that in all particu-lars mentioned in this section he is capable of making such bond. If the principal of said bond is known by said township board or the board of trustees, or common council of the village or city, to be a person whose character and habits would render him or her an unfit person to conduct the business her an unfit person to conduct the business of selling liquor, they shall refuse to endorse said bond with their approval and the bond shall not be received by the county treasurer unless so approved. The principal shall not be allowed to sell liquors in any other building or place than that specified in said bond, without giving notice and executing another bond. A new bond shall be required in case of death insolvency or removal of either of death, insolvency, or removal of either of the sureties, and in any other contingency the treasurer determines to require it. No liquor may be sold after the time the county induor hay be soft after the time the countries treasurer gives notice to procure a new bond, until said bond shall have been executed, approved by the proper board, and filed with the county treasurer; and any such sale shall be a misdemeanor, and shall be a misdemeanor, and shall be a misdemeanor. be punished accordingly. Notices shall be served by the sheriff, who shall be paid from served by the sheriff, who shall be paid from the county treasury. [The Supreme Court decides that the provision which leaves it discretionary with the municipal boards to deprive any person of the right of selling, because of their judgment that the person is unfit, is unconstitutional and void; also

the power in a county treasurer to require new bonds in any contingency which he may determine should require it.]

SEC. 9. One-half of all the taxes, after deducting treasurer's fees, shall be placed to the credit of the township, village or city from which the same was collected, and shall be paid on demand to the township, village or city treasurer, to be applied as other general funds. The other half shall be placed to the credit of the general fund of the county. The county treasurer shall receive and retain 1 per cent. on all moneys paid to him, as a recompense in full for all his services in collecting liquor taxes. In the Upper Peninsula all the moneys go to the town or city.

the town or city.

Sec. 10. It shall be the duty of every county treasurer, sheriff, deputy sheriff, police officer or other person having notice or knowledge of any violation of the provisions of this act, to immediately notify the prosecuting attorney of the county thereof, and it shall be the duty of such prosecuting attorney when complaint on oath is made forthwith to prosecute every person violating any of the provisions of this act and for each and every violation

thereof,

SEC. 11. It shall be the duty of every county treasurer and county clerk to file full statements of payments. A yearly report by the county treasurer shall be made to the auditor general, and published in some newspaper published in the treasurer's county, if there be one, and in two if there be two. The expense of such publication shall be paid out of the contingent fund of the county. All blanks shall be prepared and furnished annually by the auditor general to the county treasurers, and by them to the township, village and city officers.

SEC. 12. In case any assessor county

SEC. 12. In case any assessor, county treasurer, prosecuting attorney or other officer whose duty it is to see that the provisions of this act are faithfully enforced, shall willfully neglect or refuse to perform his duty, he shall be liable to a penalty of one hundred dollars for each offense, and the governor may, in case of such neglect or refusal, after summary hearing and determination thereon and deciding the same to have occurred, appoint some other person to perform the duties of such officer prescribed by this act, who shall, upon being so appointed, have like powers and duties, and receive the same fees, under this act, as such assessor, treasurer, prosecuting attorney or other officer, as the case may be

such assessor, treasurer, prosecuting attorney or other officer, as the case may be.

Szc. 13. No person except a druggist, who shall be governed by section two of this act, may sell, furnish or give any spirituous, malt, brewed, fermented, or vinous liquors, to any minor, to any intoxicated person, or to any person in the habit of getting intoxicated, or to any Indian, or to any person of Indian descent, or to any person when forbidden in writing so to do by the husband, wife, parent, child, guardian or employer, of such persons, or by the supervisor of the township, mayor or director of the poor, or the superintendent of the poor of the county where such persons shall reside or temporarily remain. Intent to violate the sat shall be inferred from the fact of the sale or gift as aforesaid.

SEC. 14. Minors and students may not be permitted to play at cards, dice, billiards or any game of chance, in any part of any building in which spirituous liquors or intoxicating drinks are sold; nor may liquors be sold to students except when prescribed by a regular physician for medicinal purposes. The punishment shall be the same as in section seven.

SEC. 15. It shall not be lawful for any person to allow any minor to visit or remain in any room where liquors are sold or kept for sale unless accompanied by his or her father or other cuardian

father or other guardian. Src. 18. Liquors may not be sold in any concert hall, variety show, theater or other place of amusement, nor in any room communicating therewith.

municating therewith.
SEC. 17. All saloons, restaurants, bars, in taverns or elsewhere, and all other places, except drug-stores, where any liquors are sold, either at wholesale or retail, shall be closed on Sunday, on all election days, on all legal holidays, and until 7 o'clock of the following morning and on each week day night after 9 o'clock until 7 o'clock of the morning of the succeeding day. And it shall be the duty of sheriffs, marshals, constables, and police officers to close all saloons, houses, or places that shall be found open in violation of the provisions of this section, and to report forthwith all such violations to the prosecuting attorney, whose duty it shall be to immediately prosecute for such violations. The word "closed" shall apply to the back door or other entrance as well as

to the front door. And in prosecutions under this section it shall not be necessary to prove that any liquor was sold. In all cities and incorporated villages the common council or board of trustees or council may allow the salcons and other places where said liquors shall be sold, to open at 6 o'clock A. M. and remain open not later than 11 o'clock P. M., of any week-day night except on election days and holidays. Any person found in the act of violating any of the provisions of this section shall be deemed guilty of a breach of the peace and punished accordingly; and the arrest therefor may be without process, and this punishment shall be taken to be in excess of all other manner of punishment in this act provided for a violation of the provisions of this section. All officers authorized to make arrests for a breach of the peace shall have like power to make arrests under the provision of this section, as in other cases of a breach of the peace. [The Supreme Court suggests that probably the provision affixing a punishment to the offence called a "breach of the peace" is unconstitutional. Sec also decisions, Sec. 3 and 7.]

SEC. 18 prescribes that violations of the

preceding five sections shall be deemed a misdemeanor, with penalty as in section 7.
SEC. 19. Whenever complaint shall be made by any person on eath before any justice of the peace or other officer or magistrate having jurisdiction, that any person is found intoxicated or has been intoxicated in any hotel, store, public building, street, alley, highway, or other public place, it shall be the duty of such justice, municipal or police court to issue a subpona to compel the attendance. the attendance of such person as aforesaid, to appear before the justice or court issuing the same, to testify in regard to the person or persons of whom, and the time when, and the place where, and the manner in which the liquor producing his intoxication was procured, and if such person, when sub-penaed, shall neglect or refuse to obey such writ, said justice or court who issued the same shall have the same power and authority to compel the attendance of the person so subposnaed, and to enforce obedience to such writ as in other civil cases. Refusal to testify shall be punished as contempt of court. The testimony of such person that any of the offenses specified in this act have been committed, shall be taken to be sufficient complaint to authorize a warrant to arrest any person or persons who may appear to be guilty of having violated any of the provisions of this act. Any person arrested on such a warrant shall be brought before the justice or court issuing the same, and all subsequent proceedings in such suit or prosecution shall be governed by and subject to the provisions of this act: Provided, that the person so testifying shall not be held or prosecuted for the intoxication concerning which such testimony shall be given. Noihing herein contained shall be so construed as to prevent prosecuting persons for becoming drunk when the testimony of said person is not sought under the provisions of

SEC. 20. Every person who shall by himself, or by any clerk, servant, agent, or employer, sell, give, or firmish, or cause to be sold, given, or furnished, any liquors to any minor in his or her residence or place of business or saloon, shall in addition to all other penalties provided therefor in this act, be liable for both actual and exemplary damages therefor to the father, mother, guardian or master, or any person standing in place of parent to such minor, in such sum,

this section.

no less than \$50 in each case, as the court or jury shall determine; except a druggist-upon the written request of a parent, guar-dian or master of such minor, or upon the written prescription and request of a regu-lar practicing physician: Provided, That the physician making such prescription shall not be the druggist, himself nor a member of the firm of druggists selling such liquors, nor an employee of such druggist or firm. But if any druggist shall furnish, sell, or give any such minor any such liquor more than once upon the same written prescrip-tion or written request, he shall be liable in damages as aforesaid, and to the extent aforesaid in each case. Every wife, child, parent, guardian, husband, or other person who shall be injured in person or property or means of support or otherwise by any intoxicated person, or by reason of the in-toxication of any person, shall have a right-of action in his or her own name against any person who shall, by selling or giving any intoxicating or malt liquor, have caused or contributed to the intoxication of such percontributed to the intortation of such person or persons, or who have caused or contributed to such injury, and the principal and sureties to the bond hereinbefore mentioned, shall be liable severally and jointly with the person or persons so selling liquor as aforesaid, and in an action provided for in this section the plaintiff shall have a right to recover actual and exemplary damages. to recover actual and exemplary damages in case of the death of either party the action and right of action given by this section shall survive to and against his executor tion snall survive to and against his executor or administrator. And in every action by any wife, husband, parent or child, general reputation of the relation of husband and wife, and parent and child shall be primal facie evidence of such relation, and the amount recovered by every wife or child shall be his or her sole and separate property. Any sale or eift of intoxicating or erty. Any sale or gift of intoxicating or malt liquor by the lessees of any premises, resulting in damages shall, at the option of the lessor, work a forfeiture of the lease, and the circuit court in chancery may enjoin the sale, giving away or furnishing any intoxicating or malt liquors, by any lessee or occupant of the premises, which may result in loss or damage or liability to the lessor, or any person claiming under such

SEC 21. The damage in all cases provided for in this act, together with costs of suit, shall be recoverable in action of trespass on the case before any court of competent jurisdiction. And in any case where parents shall be entitled to such damages either the father or the mother may sue alone therefor. But recovery of one of said parties shall be a bar to a suit brought by the other.

SEC. 22. Village and city marshals and, in cities having no marshal, the chief of police, or some subordinate appointed by such chief, shall visit at least once a week all places within their respective jurisdictions where any of said liquors as sold or kept, to learn if any of the provisions of this act have been or are being violated, and whenever such officer shall learn of a violation of any of the provisions of this act, it shall be his duty to enter complaint before the proper justice of the peace or police justice, and to do whatever shall be necessary to bring the offender to justice.

SEC. 23. No justice of the peace or police justice shall require security for costs to be given, but shall take the complaint and examination of the witness as in other cases, and if the offense appears to have been committed, he shall issue his warrant for

the arrest of the offender, and shall notify the prosecuting attorney, whose duty it shall be to appear and prosecute the same. Sec. 24. All persons engaged as owner, or as clerk, agent or servant, or employee, but he accept the same that he are the left and the same that he are the same that he

Princishall be equally liable as principals. pals shall be liable for the acts of their em-ployees for any violation of this act.

Secrious 25 to 29 contain regulations for branding barrels and casks, and against adulteration of liquors.

SEC. 30. Druggists, physicians, and per-sons engaged in the mechanical arts may compound liquors for medicinal and mechan-

ical purposes Sec. 31. I

Sec. 31. During the time when, by the provisions of this act, places where liquor is sold or kept for sale must be closed, all curtains, screens, partitions and other things that obstruct the view from the sidewalk, street, alley or road in front of, or at the side or end of said building, or the bar or place in said room where said liquors are sold or kept for sale, shall be removed. Punishment as in section 7.

Sec. 32 declares that taxes paid prior to the time the act goes into effect shall be suf-

ficient for the current year. Sec. 33. That for the better enforcement of this act in that portion of the county of Wayne which forms the suburbs of the city of Detroit, the jurisdiction of the board of metropolitan police of said city is hereby extended over the townships of Springwells, Greenfield, Hamtramck, and Grosse Point, in said county. And it shall be the duty of said board of metropolitan police to police said townships sufficiently strong to enable them to enforce the provisions of this act within the limits thereof, and for this purpose said board of metropolitan police are authorized to increase the police force under their control, to mount said increase or any portion thereof; and are vested with the same authority as is now conferred upon them within the corporate limits of the said city of Detroit, and may use all or any portion of the force under their control.

police force so employed in said townships shall have and are hereby vested with the same powers to enforce the provisions of this act and to preserve the peace as is by general law conferred upon the constables therein. The expenses of maintaining such extra force of police in said townships shall be paid monthly by the county of Wayne out of the moneys paid into the treasury of said county under the provisions of this act on duly certified vouchers therefor, prepared and submitted by said board of metropolitan and submittee by said board of metropolitan police to the board of county auditors of said county, who are hereby directed to audit and pay the same in the same manner as other claims for services against the county of Wayne are audited and paid. [This section was declared unconstitutional by the Supreme Court.1

SEC. 34 provides for the customary repeal of inconsistent acts and for the continuation of actions pending under the old law; also that this act shall not be operative, except as to druggists, in any county that shall have prohibited the manufacture and sale of the liquors mentioned in this act, in any

manner now or that shall be provided by law, while such prohibition is in force. The same Legislature passed laws to pun-ish persons found drunk in any hotel, tavern, ish persons found drunk in any hotel, tavern, inn, or place of public business, or in any railway or street car, or in any street, alley, lane, highway, or railway, or other public place, or in any public assemblage of people, upon penalty of a fine of \$20 and costs, or 30 days in the county jail, or both; to prohibit liquor-selling within a mile of the Michigan Soldiers Home at Grand Rapids, on penalty of \$25 to \$100 fine, and ten to civity days in the county jail (may be 90 days sixty days in the county jall may be 90 days if fine unpaid; and for prohibiting the selling, furnishing, or giving any spirituous, malt, fermented, or vinous liquors to any inmate of the Home, except for medicinal purposes and when such inmate is on furlough and away from Grand Rapids, on pen-alty of \$25 to \$100 fine or imprisonment for 90 days or less, or both.

#### Fish and Came Laws.

A number of the States have passed laws to preserve the fish and game within their limits from utter destruction. Each county in Maine has, or is entitled to have, an officer entitled the "Moose Warden," whose duty it is to see that moose are not killed at any time in his county. Even hares and rabbits are protected to some extent in New York, Pennsylvania, and other States. In the for-Pennsylvania, and other States. mer there is absolute prohibition of the slaughter of wild song-birds, except the English sparrow, and in all the States some penalty, from \$5 to \$50, is prescribed for killing song-birds. Most provisions of the game laws in this country, however, are of little interest except to professional sportsand only a summary of the law of Michigan on this subject is subjoined.

The Governor appoints a Game and Fish Warden, who has deputies in each county. Game is protected from killing at certain

times of the year as follows

The deer, in the Lower Peninsula, from Dec. 1 to the next Nov. 1; Upper Peninsula, Dec. 1 to the next Nov. 1; Upper remissina, Nov. 15 to Oct. 1 next after. It must not be killed at any time by a pit, pitfall, or trap, nor while in a stream, pond, or lake, nor while in red coat, or the fawn in spotted coat. No dog or artificial light is allowed in hunting the deer. The elk is not to be killed until May, 1889.

It has almost entirely disappeared from the State, although a noble specimen was shot in the Huron Peninsula but a few years ago. Birds are not to be taken by any trap, snare, or net, or by means of a punt, or shot with the swivel-gun, nor are they to be dis-turbed from or upon their nestings. Insecteating birds must not be killed or captured, or their nests molested, except the English sparrow, for killing which a bounty of one cent a head is offered by law.

Against wild pigeons no firearms must be used within five miles of their nesting-places, nor any trap or other means of capture within two miles, at any time from the first

to the last hatch at such nesting.

The partridge or ruffed grouse, the wild duck, wild goose, and other wild water-fowl or snipe, and the woodcock, must not be killed from Jan. 1 to Sept. 1; the quail, Jan. 1 to Nov. 1; the pinnated grouse or prairie chicken, Nov. 1 to Sept. 1; and the wild turbur from key from Jan. 1 to Oct. 1.

It is a misdemeanor to kill, have in posses sion, transport, have with intention to transport beyond the State, or expose for sale any deer, ruffed or pinnated grouse, quail, or wild turkey, or any part of their carcass, except for consumption as food.

Speckled trout and land-locked salmon are protected from Sept. 1 to May 1 next following, and grayling or California trout Nov. 1 to June 1; nor may they be taken at any time except by angling. The taking of other varieties of fish is not restricted as to time.

1 - Sec 11-4-

#### Hints to a Young Tradesman.

BY DR. BENJAMIN FRANKLIN.

Remember that time is money. He that can earn ten shillings a day by his labor, and He that | goes auroad or sits idle one-half that day, though he spend but sixpence during his diversion or idleness, ought not to reckon

diversion or idieness, ought not to recken that the only expense; he has already spent or thrown away five shillings besides. Remember that credit is money. If a man lets his money lie in my hands after it is due, he gives me the interest, or so much as I can make of it during that time. This amounts to a considerable sum where a man has a good and large credit, and makes good

Remember that money is of a prolific generating nature. Money can beget money, erating nature. Money can beget money, and its offspring can beget more, and so on. Five shillings turned is six; turned again, and it is seven and threepence; and so on till it becomes one hundred pounds. The more there is of it, the more it produces every turning, so that the profits rise quicker and quicker. He that kills a breeding sow destroys all her offspring to the thousandth generation. He that murders a crown da generation. He that murders a crown destroys all that it might have produced, even scores of pounds.

Remember that six pounds is but a great

a day. For this little sum (which may be a day. For this little sum (which may be daily wasted either in time or expense unperceived) a man of credit may, on his own security, have the constant possession and use of a hundred pounds. So much in stock, briskly turned by an industrious man, produces great advantage.

"The good pay-Remember this saying, "The good paymaster is lord of another man's purse. He that is known to pay punctually and exactly at the time he promises, may at any time and on any occasion raise all the money his friends can spare. This is sometimes of his friends can spare. This is sometimes of great use. After industry and frugality, nothing contributes more to the rising of a young man in the world than punctuality

and justice in all his dealings; therefore never keep borrowed money an hour beyond the time you promised, lest disappointment shut your friend's purse forever.

The most trifling actions that affect a man's credit are to be regarded. The sound of your hammer at five in the morning or nine at night, heard by a creditor, makes him easy six months longer; but if he sees you at a billiard table or hears your voice at a tavern when you should be at work he sends for his money the next day, demands it before he can receive it in a lump. It shows besides, that you are mindful of what you owe; it makes you appear a careful as well as an honest man, and that still increases your credit.

your credit.

Beware of thinking all your own that you possess, and of living accordingly. It is a mistake that many people who have credit fall into. To prevent this, keep an exact account, for some time, both of your expenses and of your income. If you take the pains at first to mention particulars, it will have this good effect—you will discover how wonderfully small, trifling expenses amount up to large sums, and will discern what might have been and may for the future be saved, without occasioning any future be saved, without occasioning any

great inconvenience.

In short, the way to wealth, if you desire it, is as plain as the road to market. It de-pends chiefly on two words, industry and frugality—that is, waste neither time nor money, but make the best use of both. money, but make the best use of both. Without industry and frugality nothing will do, and with them everything. He that gets all he can honestly, and saves all he can (necessary expenses excepted), will certainly become rich—if that Being who governs the world, to whom all should look for a blessing on their honest endeavors, doth not in his wise providence otherwise determine.

#### Business Pointers.

Look to your credits, but look out when your credit is too good.

Have an eye to all that may damage by neglect.

Get into an old firm, rather than establish

picase her. <u>.....</u>....

Have a general extended knowledge of all things in which you deal. When you buy, take care; when you sell,

take quadruple care.

Marry early a good wife; but a poor one
may be better than none.

Better be upright with poverty than wicked with plenty.

Don't depend upon your own lungs alone; use the lungs of the press.

Never regret what is irretrievably lost.

Never expose your disappointment to the

world. Be civil and obliging to all; it costs nothing, and is worth much.

Rest satisfied with doing well, and leave.

others to talk as they will. Resolve to perform what you ought, and perform without fail what you resolve.

Always speak well of your friends, but of your enemies speak neither good nor ill. Go into business on your own money, and

rather too late than too early in life. Keep your property well insured; you cannot afford to lose while you try to make.

Mrs. Grundy will not pay your bills; therefore don't let your wife spend too much to

Treat your customers as your friends, by serving them in the best manner, and never let them be deceived or disappointed.

Take advantage of modern facilities, and accomplish as much in a single day as once required weeks, months, or even years.

Never allow a person to do any service for you without first agreeing upon the cost to you. This rule, strictly adhered to, will save you many annoyances.

Never sign a paper without reading it; and Never sign a paper without reading it; and if after reading, you do not understand it, have it thoroughly explained before you put a signature to it. It is best to get some third person, who is not interested in the matter at all, to explain the meaning of the control of the what is not clear, or to point out words that may have two meanings in the document.

Always make a memorandum in your note book of any contract you undertake for money or any agreement to work. It saves much trouble to keep a memorandum-book and put down the dates when you either pay or receive money. Whenever money passes on account, set it down. If any money or thing of value goes through your money or thing of value goes through your hands, give a receipt for it and make a memorandum. Your receipt settles the amount that passes, and that cannot be disputed. When you pass it to a third party, get a receipt and keep it. This form is as important in the transfer of income, trustmoney, or valuables among your own family as with other persons.

### Facts About Money.

THE UNITED STATES.

The legal weights of our coins, in grains, are as follow: Gold — double-eagle, 516; eagle, 258; half-eagle, 129; \$3 piece, 77.4; quarter-eagle, 64.5; \$1 (new), 25.8. Silver quarter-eagle, 04.0; \$1 (new), 23.8. Silver— standard dollar, 42.5; half-dollar, 192.9; quarter-dollar, 96.45; 20-cent piece, 77.16; dime, 38.88; half-dime, 19.2; three-cent piece, 11.52. Minor coins, the older five-cent piece or "nickel," 77.16; three-cent piece, 30; two-cents, 96; cent, 48. Our gold and silver coinage has ten per cent of alloy. The five- and three-cent pieces are 75 per cent copper and 25 per cent nickel; the twoand one-cent pieces, 95 per cent copper, 5

per cent tin and zinc.

The older "nickel" offers a convenient measure of the metric system, at least as to length and weight. Five of them, laid side by side and touching each other, equal four inches, which is the French decimetre, or 100th of a metre, almost exactly. A single nickel, or the twenty-cent piece, weighs as much as five grams (each 15½ grains), very nearly. Six of either of these coins weigh one ounce, with sufficient nearness to enable anyone to carry his own letter-weights in his pocket. The dime weighs 21/6 grams, the half-dollar 121/6. In any of our silver coins, except the standard dollar, \$1.20 equal one ounce, or a single letter rate. Forty dollars in them equal one kilogram (about 21-5 pounds); \$4, one hectogram; 40 cents, one decagram.

The die of the Goddess of Liberty upon our coins was devised by Mr. Spencer, inventor of the Spencer lathe. He cut a medallion of Mrs. Washington, an i some of the first issue of coins were struck with her portrait. When Gen. Washington saw them he was much displeased, and demanded that the figure be changed. Mr. Spencer then placed a cap on the head, altered the features a little, and called it the Goddess

of Liberty.

of Liberty.

The portrait-heads upon the treasury notes issued by the Government are: \$1, Washington; \$2, Jefferson; \$5, Jackson; \$10, Webster; \$20, Hamilton; \$50, Franklin; \$100, Lincoln; \$500, Gen. Mansfield; \$1000, DeWitt Clunton; \$5000, Madison; \$10,000, Jackson On silver certificates—\$1, Mrs. Washington; \$10, Rooert Morris; \$20, Commodore Decatur; \$500, Edward Everett; \$100, James Monroe; \$500, Charles Sumner; and \$1000, W. L. Marcy. On gold notes—\$20, Garfield; \$50, Silas Wright; \$100, Thomas H. Benton: \$500, A. Lincoln; \$1000, Alexander Hamilton; \$5000, James Madison; \$10,000, Andrew Jackson.

#### FOREIGN.

The value of the British pound sterling in the payment of custom-house duties in the United States was fixed by act of Conthe United States was fixed by act of Congress at \$4.81. Its value in the old coin of the United States, purer than the present coin, is \$4.44.49=\$40.9, and this is taken as a basis of exchange. Hence, if exchange on London is quoted in New York at 10 per cent premium, a pound sterling is worth \$4.44.9 with 10 per cent added=\$4.84.89. Its event, yearly all in Edderal money. exact value in Federal money, as proclaimed by the Secretary of the Treasury Jan. 1, 1887, is \$4.8665. The guinea is 21 shillings, or \$5.12; the sovereign is the gold pound-piece; the shilling is worth 24.3 cents; the penny two cents. The crown is a five-shil-ling piece, worth \$1.21.

The French napoleon, or 20-franc piece, is worth \$3.85; the 5-franc piece, 97 cents:

franc, 19.3 cents. So the Belgian and Swiss franc.

The German or the Austrian union crown is \$6.64; North German thaler, 72 cents; double thaler, \$1.44; Austrian or South German florin (gulden), 35.9 cents; German mark, 23.8 cents; groschen, 2.4. The Netherlands florin (guilder) is 40.2 cents,
The Spanish real is 5 cents; peseta, 19.3; duro, \$1; doubloon, \$5.

The Italian lira represents 19.3 cents, the scudo 97. In Denmark, Sweden, and Norway the

crown is 26.8 cents. Portugal has the milreis for its monetary unit, at \$1.08. The milreis of Brazil is but

54.6 cents. In Russia, the rouble (100 copecks) equals 58.2 cents.

Turkey has the piastre, at 4.4 cents. Greece, the drachma, 19 3 cents.

Egypt, the pound, \$4.943, India, the rupee, 46.6 cents, A lac of rupees (100,000) is worth \$46,600.

China, the tael, \$1.48.

Japan, the gold yen, 99.7 cents; silver

yen, 78.4.
Mexico, the dollar, 79 cents.
Hayti, the gourde, 96.5 cents.
Cuba, the peso, 98.2 cents. The peso of
Chili is 91.2 cents; of the Argentine Republic, 96.5; of the United States of Colombia
(as also the sucre of Ecuador, the soi of Peru, and the boliviano of Bolivia), 72,7 cents.

The coins of Canada and other British possessions in America have usually the same value as corresponding coins in this country, though banks sometimes discrim-

inate against them.

In all the above cases, where but a single coin is mentioned, it is the monetary unit of the country, from which the values of other coins of the same country may easily be obtained, when their numerical relation to the unit is found. In all cases, except China, the value of the unit in our money is as fixed by the Secretary of the U.S. Treasury, Jan. 1, 1897.

Jan. 1, 1887.

In some countries both gold and silver coinage is legal tender for all amounts. Belgium, the Netherlands, Switzerland, France, Spain, Italy, Greece, Japan, the Argentine Republic, Venezuela, Chili, Cuba. Argentine Republic, Venezuela, Chili, Cuba and Hayti have the double standard; Great Britain, the German Empire, Norway, Sweden, Denmark, Portugal, Turkey, Egypt, and Brazil have the single gold standard: Austria, Russia, India, the United States of Colombia, Bolivia, Ecuador, Peru, and Mexico the single silver standard.

Intemperance is well known to be a prolific incitement to the causes of divorce. Swiss investigator professes to have dis-covered a close relationship between divorce courts and drinking saloons, and to be able to ascertain on an average the number of to accertain on an average the number of divorces per thousand marriages by doub-ling the number of drinking saloons per thousand men. In Appenzell, for instance, there are 37 public liquor-houses and '8 divorces, in Zurich 25 and 57, and in Berne 15 and '9 16 and 36.

The Earth is 24,899 miles around at the equator; diameter there, 7925 miles; at the poles, 7899; mean diameter, 7916; land surface, 54,500,000 square miles; water, 142,000,000; total, 196,900,000; weight, 6000 hillion billion tons.

### Chief Countries of the World.

Countries.	Population.	Sq. Miles,	COUNTRIES.	Population.	Sq. Miles.
China	382,000,000	4,179,559	Würtemberg	1,971,118	7,581
British Empire			Servia		
Russian Empire			Oman		81,000
France and Colonies			Guatemala		46,774
United States			Ecuador		248,870
German Empire			Tripoli		899,000
Anstro-Hungary			Transvaal	800,000	110,193
Japan	AR WILL WAR		Salvador,	554,000	7,228
Holland and Colonies			Uruguay		72,112
Turkish Empire			Paraguay		92,000
Italy			Honduras		42,658
Spain and Colonies		361,953	Nicaragua		51,660
Sokoto			Dominican Republic		20,596
Corea			Montenegro		
Brazil			Costa Rica	180,000	
Mexico			Orange Free State		
Congo Free State			Hayti		
			Hawaii		
Persia Portugal and Colonies			- 7		1
			Of these the United 8	States of An	erica and
Egypt			the United States of Co.	lombia, Fran	ice, Switz-
			erland, Mexico, the Arg	entine Repu	iblic, Gua-
Morocco			temala, Peru, Bolivia,	Ecuador.	Uruguay,
Belgium			Paraguay, Honduras,	Nicaragua,	Salvador,
Siain			Costa Rica, Hayti, the		
Roumania			Transvaal, and the Do	minican Re	public are
Colombia	1,000,000	1001,400	Dates Onnet Dates		- A sandana

4,000,000

3.026,000

3,000,000

3,000,000 2,972,805

2,970,000 2,906,752

2,325,000 2,130,000

2,121,988

2,115,340

2,045,179 2,007,919

1.979,453

331,420 Transvaal, and the Dominican Republic are republics; Great Britain, Germany, Austro-Hungary, Holland, Spain, Italy, Portugal, 328,578 Weden and Norway (together), Denmark, Belgium, Saxony and Würtemberg (both in the German Empire), Roumania, Bulgaria, 15,981 Greece, Servia, Brazil, and Hawaii are limited monarchies; Russia, Turkey, Egypt (subject to Turkey, as are also Tripoli, and, in a sense, Roumania and Bulgaria), Oman, and Montenegro are absolute monarchies; and China, 60rea, Sokoto, Persia, Morocco, Siam, Af-Corea, Sokoto, Persia, Morocco, Siam, Af-ghanistan, Bokhara, Abyssinia, and Madagas-car absolute despotisms. Russia, Austro-Hungary, Germany, China, Japan, and Brazil are ruled by emperors, and the queen of Eng-land also bears the title, "Empress of India."

Afghanistan.... Argentine Republic ....

Abyssinla .....

Bolivia ....

Venezuela.....

Saxony ..... 

Bokhara

Denmark .

Bulgaria ...

Madagascar .....

Populations of Foreign Cities.

92,300 566,159 307,525 14,842 24,700 24,977

- · · · · · · · · · · · · · · · · · · ·		, oroign ormosi			
CITIES.	Year.	Populat'n	CITIES.	Year.	Populat'n
Londor	1886	4,149,533	Breslau	1885	298,893
Paris	1836	2,341,550	Milan	1881	295,548
Cantol	est.	1,600,000	Copenhagen	1886	285,700
Berlin		1,315,412	Lucknow	1881	284,779
Vienna	1880	1,103,857	Shanghai	est.	278,000
St. Petersburg		929,100	Rome	1881	273,268
Tokio/	1884	902,837	Kioto, Japan	1884	255,408
Constantinople	1885	873,565	Dublin	1891	249,602
Calcutta	1881	871,504	Barcelona	1877	248,943
Bombay	1881	773,196	Lisbon	1878	246,843
Moscow	1884	753,469	Dresden	1885	245,515
Glasgow	1881	674,095	Bordeaux	1886	240.582
Liverpool	1886	586,320	Edinburgh	1881	236,002
Peking, China	est.	500,000	Turin	1881	230,183
Naples	1881	463,172	Bucharest	1876	221,805
Birmingham	1886	434,381	Bristol	1886	220,915
Buda-Pesth	1886	422,557	Sydney, N. S. W	1881	220,427
Brussels	1886	416,659	Bradford, England	1886	219.411
Warsaw	1882	406,261	Nottingham, England	1886	217,733
Madras	1881	405,848	Stockholm	1885	215,688
Lyons	1886	401,930	Salford, England	1886	211,241
Madrid	1877	397,816	Alexandria	1882	208,755
Manchester	1886	376,895	Belfast	1881	207,671
Marseilles	1884	376,148	Palermo	1881	205,712
Amsterdam	1886	372,328	Smyrna	est.	200,000
Cairo	1882	368,108	Santiago, Chili	est.	200,000
Rio de Janeiro	1885	357,332	Teheran, Persia	est.	200,000
Hyderabad, India	1881	354,692	Benares	1881	199,700
Osaka, Japan	1884	353,970	Antwerp	1886	198,174
##bourne	1885	345,380	Hull	1886	191,501
Leeds	1886	339,057	Lille	1886	188,272
Sheffield	1886	310,976	Rotterdam	1886	173,884
Hamburg	1885	305,690	Delhi	1881	178,398
Hamburg.	est.	300,000	Leipsig	1885	170,07
C)	<del></del>	-			

<sup>\*</sup>Estimated.

## Religions of the World.

The inhabitants of the globe, estimated in even millions according to religious creed, are as follow: Christians, 338; Buddhists, 340; as follow: Christians, 338; Buddhists, 340; Mohammedans, 210; devotees of Brahma, 175; of Confucius, 80; of Shintoism, 14; Jews, 7.

In Europe there are 147,300,000 Roman Catholics, 71,500,000 Protestants, and 69,300,000 in Greek and other Eastern churches; in Asia, 4,900,000, 1,800,000, and 8,500,000 respectively; Africa, 1,100,000, 1,200,000, and 3,200,000; in America, 47,300,000 Roman Catholics and 30,000,000 Protestants; in Australia and Poly-nesia, 400,000 and 1,500,000; totals, 201,000,000,

106,000,000, and 81,000,000

Recent statistics for the English-speaking world show: Episcopalians, 21,450,000; Metho-dists, 16,100,000; Roman Catholics, 14,750,000; Presbyterians, 10,700,000; Baptists, 8,210,000; Congregationalists, 5,650,000; Free-thinkers, Congregationalists, 5,650,000; Free-thinkers, 1,500,000; Lutherans, etc., 1,500,000; Unitarians, 900,000; minor religious sects, 2,800,000; of no particular religion, 10,000,000; total, 93,560,000. The statistics of May, 1887, the latest at hand, are, for the United States, as follow:

DENOMINATIONS,	Churches	cants.
Adventists	91	11,100
Adventists, Second	583	63,500
Adventists, Seventh-Day	798	23,111
Baptists	30,522	2,732,570
Baptists, Anti-Mission	900	40,000
Baptists, Free	1,542	82,323
Partiete other Free	650	34,144
Baptists, other Free Baptists, Disciples	4,536	582,800
Daptists, Disciples	1,662	122,000
Baptists, Christians, North	75	18,000
Baptists, Christians, South	500	45,000
Baptists, Church of God.	94	8,720
Baptists, Seventh-Day		
Baptists, Dunkards	350	60,000
Baptists, Six-Principle	16	1,450
Christian Union	1,500	120,000
Congregationalists	4,277	436,379
Episcopalians, Protestant.	4,434	418,531
Episcopalians, Reformed.	90	12,000
Friends, Orthodox	600	70,000
Fr'ds. Non-affiliating Orth.	100	12,000
Fr'ds, Non-affiliating Orth. Friends, "Hicksite" German Evangelical	******	23,000
German Evangelical	675	125,000
Lutherans, General Synod	1,449	138,988
Lutherans, Unit. Synod, S.	360	29,683
Lutherans, Gen'l Council.	1,835	258,408
Lutherans, Synodic'l Conf.	2,006	297,631
	1,928	206,120
Lutherans, Independ't Syn	550	100,000
Mennonites		1,990,377
Methodists, Epis., North Methodists, Epis., South	20,263	
Methodists, Epis., South.	10,951	1,056,028
Methodists, Epis. Airican	2,800	500,000
Method., Epis. African Zion	*2,200	314,000
Method., Epis. Unit. Breth.	4,332	185,109
Methodists, Epis. Colored.	2,016	165,000
Methodists, Protestant Methodists, Evang. Ass'n	1,799	183,514
Methodists, Evang. Ass'n.	1,808	132,508
Methodists, Am. Wesleyan	495	17,727 13,750
Methodists Congregation'l	70	13,750
Methodists, Free	358	12,314
Methodists, Free Methodists, Independent	35	5,000
Methodists, Primitive Methodists, Union Am.Col.	125	3,837
Methodists, Union Am.Col.	50	3,500
Moravians	83	10,686
Presbyterians, Northern.	6,281	661.809
Presbyterians, Southern.	2,198	143,743
Presbyter'ns, Cumberland	2,546	138,564
Presbyten, Cumberl'd, Col.	500	13,000
Presbyth, Cumber d, Col.	881	91,086
Presbyterians, United Presbyterians, Reform	121	10,856
Presbyterians, Reform,	175	9,563
Presb., Welsh Calvinistic.	112	
Presb., Asso. Reform, S.		7,015
Presb., Reform Gen ISynco	54	6,800
Reformed (late Dutch)	536	83,037
Reformed (late German).	1,468	176,937
Roman Catholics	10,191	*7,000,000

DENOMINATIONS.	Churches	Communi-	
Swedenborgians Unitarians Universalists	. 365	5,015 *20,000 85,550	
*Estimated. Total	135,716	19,018,977	

The Sunday-school statistics of all countries are at latest collection about as follow:

	Schools	Members,
NORTH AMERICA-		-1 - 1
United States	99,762	9,141,648
British Am. Provinces	6,322	489,206
Central America, Mexico,	0,000	200,000
and West Indies	850	38,250
EUROPE-Eng. and Wales		5,794,212
Scotland		614,375
Ireland	******	326,794
Italy	200	13,410
Switzerland		97,893
Denmark	1,591	49,000
	2,851	263,000
Germany		145,440
Holland	1,291	70.600
Norway	*****	216,700
Sweden	127222	
France	1,197	126,370
Spain	100	8,400
Portugal	30	2,100
Belgium,	57	2,510
Bohemia	92	3,139
Moravia	30	1,230
Russia	******	11,500
Not enumerated above	*****	10,500
Asia-Persia	107	5,316
India	*****	105,000
Japan	150	7,019
Central Turkey	60	7,600
Other portions		32,000
Africa-Egypt	62	2,649
Other portions	****	167,100
SOUTH AMERICA	350	153,000
OCEANICA-Australasia		451,340
Hawaiian Islands		16,300
Other portions		26,500
The world		18,400,157

The Sunday-school statistics of the United States, as submitted to the last International S. S. Convention, in Chicago, June, 1887, reported Alabama with 3048 schools and 177,427 members; Alaska, 8 and 1577; Arizona, 32 and 1591; Arkausas, 1368 and 78,912; California, 725 and 67,272; Colorado, 278 and 23,385; Connec ticut, 1083 and 160,351; Dakota, 801 and 36,471; Delaware, 217 and 25,619; Dist. Columbia, 177 and 38,810; Florida, 670 and 40,695; Georgia, 5.991 and 314.311; Idaho, 43 and 3619; Illinois, 6477 and 603,978; Indian Territory, 222 and 9679; Indiana, 4491 and 413,582; Iowa, 4500 and 333.000; Kansas, 3544 and 246,554; Kentucky, 2647 and 257,407; Louisiana, 522 and 26,748; Maine, 104, 273. 1325 and 104,375; Maryland, 2241 and 279,069 Massachusetts, 1628 and 255,854; Michigan 3373 and 300,000; Minnesota, 1752 and 107,957; Mississippi, 1614 and 96,444; Missouri, 3200 and 259,471; Montana, 80 and 4650; Nebraska, 2150 and 137,975; Nevada, 31 and 3591; New Hamp and 137,975; Nevada, 31 and 3591; New Hamp-shire, 524 and 54,686; New Jersey, 1977 and 266,099; New Mexico, 45 and 1570; New York, 6884 and 1,028,933; North Carolina, 4197 and 231,518; Ohio, 6751 and 706,162; Oregon, 200 and 23,280; Pennsylvania, 8776 and 1,078,692; Rhode Island, 371 and 46,565; South Carolina, 1607 and 116,369; Tennessee, 3840 and 284,60; Texas, 3097 and 213,786; Utah, 81 and 6182; Vermon, 631 and 61,188; Virginia, 8655 and Vermont, 631 and 61,188; Virginia, 3652 and 320,459; Washington, 129 and 7871; West Virginia, 1888 and 140,023; Wisconsin, 1610 and 190,080; Wyoming, 54 and 2698; total, 99,762 and 9,141,648.

#### Historic Names, With Popular Titles.

Achilles, the Swift-footed, from his fast running.

Adams, John Quincy, the Old Man Eloquent.

Eneas, the Plous (dutiful, in ancient use), because he was said to have carried his aged

because he was said to nave carried me against the ron his back out of burning Troy.

Alexander, the Great, King of Macedon.

Alfonso I.. the Conqueror, King of Portural who rescued that country from the gal, who rescued that country from the Moors. A. V., the African, from his conquests in Africa. A. VI., the Valiant. A. X., the

Alfred, the Great, King of the West Saxons. Angelico, Fra (Giovanni Guido), called the Angelic, from the beauty of the angels and

saints he painted.

Antiochus I., Soter, or the Saviour, King of Syria, who saved his country by a great victory over the Gauls. A. II., Theos, or the God, because he put to death Timarchus, tyraut of Miletus. A. III., the Great. A. IV., Epiphanes, or the Illustrious.

intoninus Pius, the Pious, also the Father

of his Country.
Aristides, the Just, on account of his integrity. Aristotle, the Stagirite, from his birthplace. Artaxerxes II., Mnemon, from his great

memory

Attila, the Scourge of God, from his devas-

Augustus, the August or Venerated, be-stowed upon the first Roman emperor by the

Aurelian, Sword-in-hand, from his bravery.
Baldwin I., Bras de Fer, or the Iron Arm.

Bayard, the Chevalier without fear and without reproach, or the Fearless and Blameless Knight.

Bede, the Venerable, one of the greatest scholars of his time.

Bismarck, the Man of Blood and Iron, Blucher, Marshal Forwarts (Forward), from

his swift marching.

Bonaparte, Napoleon, the Great, the Little Corporal, the Nightmare of Europe. N. III., the Little, from the contrast with his uncle, the first Napoleon.

Brutus (brutish or stupid), because he pre-

tended to be insane.

Burns, Robert, the Bard of Ayrshire Caligula, from the caliga or half-boot of the Roman soldiers, which he wore when a boy in his father's camp.

Canute, the Great, first Danish king of Eng-

Capet, Hugh, called Capet from the size of his head, or as some think from the monk's hood he wore.

Cato, so called as "wise," was also Cato the Censor and Cato the Elder. His great-grand-son was Cato the Younger, called also Cato

of Utica. of Utica.
Charles I. of England, the Royal Martyr.
C. II. of England, the Merry Monarch. C. II.
of France, the Bold. C. III., the Simple. C.
IV., the Fair. C. V., the Wise. C. VII., the
Beloved. C. VII., the Victorious. C. VIII.,
the Affable. C. I., the Great (Charlemagne,
Emperor of the West). C. III., the Fat. C. X.
of Sweden, the Pyrrhus of the North. C. XIII.,
the Madman of the North. C. the Bold, last
Duke of Burgundy. C. Martel (the Hammer),
from his terrible blows in the battle of Tours.
Chaucer, Father of English Poetry.

ن لنعه

from his terrible blows in the battle of Tours. Chaucer, Father of English Poetry. Clay, Henry, Harry of the West, the Millor of the Slashes. Constantine I., the Great. Constantine I., the Admirable, from his statements, James, the Admirable, from his statements.

Cromwell, the Immortal Rebel, so called by Byron in "Childe Harold."

Cyrus, the Elder, or the Great. Cyrus the Younger was another King of Persia, but not of the Elder's line.

Demetrius Poliorcetes (Besieger of Cities), King of Macedon.

Dentatus, Roman consul, born with teeth. Diaz, Rodrigo, the Cid (or Lord), and the Champion.

Edward, the Confessor, King of England Edward III., the Black Prince, from the color of his armor.

color of his armor.

Eliot, John, Apostle of the Indians.

Elizabeth of England, Good Queen Bess, and the Virgin Queen.

Elizabeth of Russi, the Northern Harlot.

Franklin, Dr. Benj., Poor Richard, from his famous Almanac.

Frederick I., Barbarosa (Redbeard). F. II., the Great.

Fremont, Gen. J. C., the Pathfinder. Genghis (Greatest) Khan.

George IV. of England, the First Gentleman

of Europe. Gregory I., the Great, Pope of Rome. Harold I., Harefoot, from his swiftness in

Haroun al Rashid (Aaron the Just). Henry I. of England, Beauclerc (Good Scholar). H. I. of Germany, the Fowler; H. II., the Lame; H. VI., the Cruel. H. the Lion, Duke of Saxony and Bavaria.

Herodotus, Father of History.

Hogg, James, the Ettrick Shepherd. Hooker, Gen. Joseph, Fighting Joe. Isabella I., the Catholic, Queen of Castilc. Ivan III. of Russia, the Great. I. IV., the

Terrible. Jackson, Gen. A., Old Hickory, from his firmness. Gen. T. J. Jackson, Stonewall, from the steadiness of his men at the first battle of Bull Run.

Joan of Arc, the Maid of Orleans. John II. of France, the Good.

Julian, the Apostate, Roman emperor.
Justinian, the Great, Emperor of the East;
J. II., Rhinotmetus (Shorn Nose).
La Tour d'Auvergne, the First Grenadier

of France.

of France.
Lee, Gen. Henry, Light Horse Harry.
Leo L, the Great, Pope of Rome.
Longinus, the Living Library.
Louis I, of France, Le Debonnaire (or the Good Natured) and the Pious; L. II., the Stammerer; L. IV., Outre Mer, or Beyond the Sea, as he had lived in England: L. V., the Idle; L. VI., the Fat; L. VII., the Young; L. VIII., the Lion; L. XII., Father of his People; L. XIV., the Grand Monarch; L. Philippe, the Citizen King.
Marion, Gen. Francis, the Swamp Fox.
Mary I., of England, Bloody Mary.
Medici, Cosmo, the Father of his Country.
Lorenzo M., the Magnificent.
Mithridates VI., the Great, King of Pontus,

Mithridates VI., the Great, King of Pontus, Moore, Thomas, the Bard of Erin.
O'Connell, Daniel, the Liberator.
Otho I., the Great, Emperor of Germany.
Pedro, the Cruel, King of Castile and Leon.
Peter I., the Great, Czar of Russia.
Peter the Hermit, Preacher of the First

Crusade.

Philip III., the Bold, King of France; P. IV., the Fair. P. the Bold, Duke of Burgunday, and P. the Good.

and P. the Good.
Ptolemy I., Soter (Saviour), because he saved
Rhodes from an enemy. P. II., Philadelphus
(Brother-lover), from his marriage with his
sister. P. III., Euergetes (Benefactor), from
his restoration of the gods carried away by Cambyses.

Richard I. of England, the Lion-heart. Scipio Africanus, the Greater and the Less, from their victories in Africa.

Scott, Sir Walter, the Wizard of the North. Shakspere, the Bard of Avon. Solyman II., the Magnificent, Ottoman Sul-

tan. Sophocles, the Attic Bee.
Taylor, Gen. Zachary, Old Rough and Ready.
Theoderic, the Great, King of the Ostrogoths.
Theodosius, the Great, Roman Emperor.
Tigranes, the Great, King of Armenia.
Timour Lenk (Tamerlane), the Lame. Vernon, Admiral Edw., Old Grog, from his grogram coat. Hence grog as the name of a liquor he served out. Victor Emmanuel, the Brave King.

Voltaire, the Sage of Ferney.
Warwick, Earl of, the King-maker.
Washington, George, Father of his Country.
Wayne, General, Mad Anthony Wayne.
Wellington, the Iron Duke. William I. of England, the Conqueror.

William of Nassau, the Silent.
Wordsworth, Wm., Bard of Rydal Mount,
Zenobia, the Semiramis of the East.

# Fictitious Literary Names.

FICTITIOUS NAMES.

A surprising number of writers, of both sexes, have written at some period of their sexes, have written at some period of their literary life, or altogether, under initials or fictitious signatures. Several good-sized volumes have been compiled of literary pseudonyms, and a list of more than four hundred, chiefly living authors, was collected some years ago, from which the following selection is made of the most celebrated. Names bestowed upon writers by others or by the public, as the title "Wizard of the North" upon Sir Walter Scott, are of course not included. The more important of these will be found in the list of historic names preceding this.

FICTITIOUS NAMES. REAL NAMES. FIGHTIOUS NAMES.
A Country Parson... Archbishop Whately.
A. K. H. B.... Rev. A. K. H. Boyd.
A. L. O. E (A Lady of
England)... Charlotte Tucker.
A Lady... Mrs. Anna Jamieson.
A Manchester Manuface. Alfred Crowquill. A H. Forrester.
Amateur Casual. James Greenwood.
Amelia. Mrs. Welby.
Amy Lothrop. Anna B. Warner.
An Amateur. C. K. Sharpe.
An American. Gen. Lewis Cass.
An Angler. Sir Humphry Davy.
An English Playgoer. John Oxenford.
An Old Man. Sir Francis Bond Head.
Ariel. Stenhen R. Wiske Asa Trenchard Henry Watterson
Aug. Dunshunner Prof. Aytoun.
Bab W. S. Gilbert.
Barrabas Whitefeather. Douglas Jerrold.
Barry Cornwall B. W. Procter.
Barry Gray R. Barry Coffin.
Beehunter. The. T. B. Thorpe.
Benedict Cruiser Geo. Aug. Sala.
Besieged Resident. H. Labouchere.
Bibliophile Jacob. Paul Lacroix Bibliophile Jacob.....Paul Lacroix. Bon Gaultier.....Prof. Aytoun. Bon Gaultier Prof. Aytoun.
Boston Bard Robert S. Coffin.
Boz. Charles Dickens.
Bret Harte. C. B. Hart.
Carl Benson Charles A. Bristed.
Caveat Emptor Sir George Stephen.
Cavendish. W. Johnson Neale.
Cavendish. Henry Jones.
Cham A. de Noé.
Charlotte Elizabeth Charlotte E. Tonna.
Charlotte Parson Rev. Chas Kingeley. Colley Cibber......James Rees. Cousin Alice . . . . . . Alice B. Neal. 

Banbury Newsman...J. M. Bailey.
Darby North.....Daniel Owen Madden.
Davenant Cecil....Derwent Coleridge. Dick Tinto... F. B. Goodrich.
Diedrich Knickerbocker Washington Irving.
Doesticks, Q. K. Philander, M. M. Thompson.
Don Leucadio Doblado. Blanco White. Dow, Junior Eldridge Paige,
Dr. Peter Morris J. G. Lockhart.
E. B. Waverly J. Wilson Croker.
E. H. T. Earl of Derby. E. H. T. Earl of Derby.
Edith May Anne Drinkwater.
Edmund Falconer Edmund O'Rourke.
Edmund Kirke. James R. Gilmore.
Edward Baldwin. William Godwin.
Edward Wm. Sidney. Beverly Tucker.
Elia. Charles Lamb.
Ellis Bell. Emily J. Bront6.
English Opium Eater Thos. De Quincey.
Ephemera. Henry Fitzgibbon.
Espriella Alvarez. Robert Southey.
Etonensis. W. E. Gladstone.
Ettrick Shepherd. James Hogg.
Ezek Richards. John Savage. Ezek Richards......John Savage Fanny Fern. Mrs. James Parton.
Fanny Forrester. Mrs. E. Judson.
Farmer's Boy. Robert Bloomfield. Father Prout......Francis Mahony. Father Prout. Francis Mahony.
Florence Percy. Mrs. E. Akers.
Frank Fairleigh Frank E. Smedley.
Frank Forester. Henry Wm. Herbert.
Gail Hamilton. Mary Abigail Dodge.
Gaol Chaplain Rev. E. Neale.
Gath. Geo. Alf. Townsend.
Geoffrey Crayon Washington Irving.
George Elict. Marian C. Evans.
George Forrest. Rev. J. G. Wood.
George Sand. Madame Dudevant.
Glance Gaylord. W. I. Bradley. George Sand Madame Dudewant.
Glance Gaylord W. I. Bradley.
Grace Greenwood Mrs. S. Lippincott.
Grace Wharton A. T. Thompson.
Graduate of Oxford John Ruskin.
Gregory Griffin George Canning. Gregory Grimin George Canning,
Hans Breitmann. Charles G. Leland,
Hans Yorkel. A. Oakey Hall.
Harkawav. Charles Marshall
Harriett Myrtle. Mrs. L. Miller,
Harry Franco. Charles F. Briggs,
Harry Gringo. Lieut. H. Wise,
Harry Hisover Charles Rrindley Harry Hieover..... Charles Brindley. Harry Lorrequer..... Charles Lever. Howadji. Geo. Wm. Curtis, Howard Glyndon Miss L. C. Redden, Ik Marvel. Donald G. Mitchell. Ik Marvei. Donald G. Mitch Impulsia Gushington. Lady Dufferin. Ingoldsby, Thos. Rev. R. Barham. Irenœus. Rev. S. I. Prime, Irish Whisky Drinker. John Sheehan. Isaac Tomkins. Lord Brougham.

FICTITIOUS NAMES.	REAL NAMES.
Isabel	.W. Gilmore Simms. .T. K. Hervey. .G. Searle Phillips.
Jack Ketch	.T. K. Hervey.
January Searle	.G. Searle Phillips.
Janus	.Dr. Dollinger.
Jasper Biddle	. Albert Smith
Jedediah Cleishbothan	Sir Walter Scott
Jeemes Pipes	.Stephen C. Massett.
Jenny June	Mrs. J. C. Croly.
Joaquin Miller	C. H. Miller.
John Hampden	Lord Nugent
John Phoenix	Cantain Derby
Joseph Hutter	.Captain Derby. .Henry N. Coleridge.
Josh Rillings	A W Shaw
Josh Billings	H W Longfellow
Junius	Sir Philip Francis
K N Penner	Sir Philip Francis. J. W. Morris. Rev Nicholas Murra
Kirwan	Rev Nicholas Murra
Launcelot Wagetaffa	Ir Dr C Mackey
Laura Barker	Mrs Tom Taylor
Lawrence Clineshy	Coores H Lawres
Lawrence Slingsby Learned Blacksmith	Flibs Doneste
Lemuel Gulliver	Tonothen Cariff
Lewis Carroll	C. I. Dodgeon
Lord Mahon	.C. L. Dougson.
Lord Manon	Plata Passal
Louis de Montalte Louise Muhlbach	Clare Mundt
W B Dramian	.Clara Mundi.
M. B. Drapier Maj. Jack Downing	Jonathan Switt.
Maj. Jack Downing	Marr Cool Har
Markham Howard Mark Littleton	. Mary Cecii Hay.
Mark Littleton	.J. P. Kennedy.
Mark Twain	.a. L. Ciemens.
Married Critic	Jules JaninMrs. M. V. TerhuneMrs. C. M. KirklandG. W. M. Reynolds.
Marion Hariand	.mrs. m. v. Ternune.
nary Clavers	.Mrs. C. M. Kirkiand.
Master Timothy	.G. W. M. Reynolds.
maurice Sand	. Maurice Dudevant.
Max Adeler	.Cnas. Heber Clark.
McArone	George Arnold.
Mercutio	George Arnold. William Winter. rsh. W. M. Thackeray. Chas. F. Halpine. Lord Houghton.
Michael Angelo Titma	rsn. w. m. Thackeray.
miles O Reilly	.Chas. F. Halpine.
moncton Milnes	.Lora Houghton.
Morgan O'Doherty Ned Buntline	.pr. wm. maginn.
Ned Buntline	.E. Z. C. Judson.
O'Brien, E. S	. Isaac Butt. M. P.
Occasional	.John W. Forney.
Old Humphrey	.George Mogridge.
Old Merry	. Edwin Hodder.
Old Sailor	. Henry M. Barker.
Oliver Okischool	.Joseph Dennis.
Old Sailor Oliver Oldschool Oliver Optic Ollapod Onuphrio Muralto	. wm. T. Adams.
Ollapod	. wiilis G. Clark.
Onuphrio Muralto	. Horace Walpole.
Orpheus C. Kerr	. Robert H. Newell.
Orpheus C. Kerr	. Louise de la Ramé.
Owen Meredith P. Fisher	.Hon. E. R. Lytton.
P. Fisher	.W. E. Chatto.
	***************************************

l <sup>*</sup>	•
FIGITITIOUS NAMES. Parson Frank. Partington, Mrs. Paul Creyton. Perley. Peter Parley. Peter Pindar. Peter Plymley. Peter Porcupine. Petroleum V. Nasby. Philopamis Varvicensi	_/ REAL NAMES,
Parson Frank	.F. Jacox.
Partington, Mrs	.B. P. Shillaber.
Paul Creyton	.J. T. Trowbridge.
Perley	.B. Perley Poore.
Peter Parley	S. G. Goodrich.
Peter Pindar	Dr. John Wolcott.
Peter Plymley	.Sydney Smith.
Peter Porcupine	. William Cobbett.
Petroleum V. Nasby	.D. R. Locke,
Philopatris Varvicensi Phiz Porte Crayon	8.Dr. Samuel Parr.
Phiz	.H. K. Browne.
Porte Cravon	.David H. Strother.
Publicola	D. E. Williams.
Puck	.John Proctor.
Q.Q	.Miss Jane Taylor.
Quiz	Rev. Ed. Caswell.
Kamabottom, Mrs	.Theodore Hook.
Quiz Kamsbottom, Mrs Robert and William	a
Whistlecraft	John Hookam Frere.
Robinson Crusoe	Daniel Defoe.
Rob Roy.	John Macgregor
Roving Englishman	.Grenville Murray.
Runnymada	Rent Digraeli
S. G. O. Sam H. Bard. Sam Slick	Hon, S. G. Osborne.
Sam H. Bard	E. G. Squier.
Sam Slick	J. C. Haliburton.
Sarah Tytler	Miss Keddie.
Serutator	J. Horlock
Shakspeare Scholar	J. C. Hanourton, Miss Keddie, J. Horlock. Richard Grant White. R. Shelton Mackenzie,
Short	R. Shelton Mackenzie
Silverpen	Eliza Metevard.
Silverpen	Sir Egerton Brydges.
Sparrowgrass	.F. S. Cozzens.
⇒peranza	Lady Wilde.
Sydney Yendys. Syntax, Dr. Tag, Rag, & Bobtail. Teufelsdroeckh. Timothy Titcomb. The Flaueur.	Sydney Dobell.
Syntax. Dr	William Coombe.
Tag. Rag. & Bobtail	Isaac D'Israeli.
Teufelsdroeckh	Thomas Carlyle
Timothy Titcomb	Dr. J. G. Holland
The Flaneur	Edmund Vates
The Governor	Henry Morford
Theodore Taylor	J. C. Hotten
Thinks-I-to-myself	Rev. Dr Edw Nares
Thomas Little	Thomas Moore
Thomas Rowley	Thomas Chatterton
The Flaueur. The Governor Theodore Taylor Thinks-I-to-myself Thomas Little. Thomas Rowley Tom Brown Tristram Merton Trusta, H Two Brothers Alfre	Thomas Hughes
Tristram Merton	T. B. Macaulay
Trusta, H	Elizabeth 8. Phelns
Two BrothersAlfre	ed and Chas. Tennyson.
Ubique	Parker Gillmore
Village Schoolmaster	Chas. M. Dickinson.
Vivian	G. H. Lewes.
Vyvian Joyeuse	W. Mackworth Praed.
Walking Gentleman	T. C Grattan.
Waters	Dr. W H. Russell.
Wathanall Mice	
AA COUGLETT, MINS	Susan Warner.
Lauriei die Seel	Parker Gillmore Chas. M. Dickinson. G. H. Lewes. W. Mackworth Praed. T. C Grattan. Dr. W H. Russell. Susan Warner. R. J. Morrison. Henry Ward Beecher.

# Actors and Actresses.

STAGE NAME.	REAL NAME.	ı
Abbott, Emma	Mrs. Weth-rell.	T
Baker, Josephine		Ī
Barnes Rose Courtney	Mrs. Jno. T. Raymond.	Ī
Barrett, Lawrence	Rora Branican	١ĩ
Barrymore, Maurice	Maurica (llina	Ė
Belgarde, Adele	Adole Lower	Ē
Dorn bonds Com	Auele Levy.	
Bernhardt, Sara	mme. Damaia.	H
Bill. Buffalo	Wm. F. Cody.	
Blanchard, Kitty	Mrs McKee Rankin.	F
Bowers, Mrs. D. P	Mrs. McCollum.	١G
Branscomb, Maud	Mrs. Everard Stuart.	16
Byron, Oliver Doud	Oliver B. Doud.	lG
Cameron, Violet	Mrs. de Bensuade.	Ĭ
Castleton, Kate	Mrs Harry Phillips	ļ
Cavendish, Ada	Mrs Frank Marchall	i
Clarton Voto	Mrs. Chas. Stevenson.	li
Clares T.W.	Mrs. Chas. Survenson.	Í
Cleves, Lilian	Mrs. Richard Foote.	
Coghlan, Rose	Mrs. Clinton Edgerly.	I
Conway, Lilian	Mrs. Chas. S. Camblos.	J
Coombs, Jane	Mrs. Brown.	.,
Cornalba, Mile	Mme, Morelli,	F
Curtis, M. R.	Samuel Strelenger.	l

STAGE NAME.	REAL NAME.
Davenport, Fanny	.Mrs. E. H. Price.
Don, Laura	.Mrs. Fox.
Drew, Georgie M	rs. Maurice Barrymore.
Dunning, Alice	Mrs Wm Lingard
Elisler, Effle	Mrs. Fred'k Webster.
Emerson. Billy	Wm Pedmond
Evtinge, Rose	Mrs Caril Coorle
Fawcett, Helen	Lode Thee Mentin
Florence, Wm. J	Was I Coult
Compton Ptoller	. WIII. J. Comin.
Gerster, Etelka	. Mrs. Dr. Gardini.
Granger. Maud	Mrs. Will R. Boxter.
Gray, Ada	.Mrs. Chas. A. Watkins.
Harrison, Louis	. Louis Metz.
Harrison, Alice	. Alice Metz.
Hart, Bob	.J. M. Sutherland.
Hauk, MinnieBaron	ess von Hesse-Wartegg.
Heron, Matilda	.Mrs. Robt. Stoepel.
Irving, Henry	.Henry Broadrib.
Janauschek, Mme	Mrs. Fred Pilot.
Jordan, Emily	.Mrs. John Chamberlin.
Karl, Tom	Thomas Carroll
Keene, Thomas W	Thos R Facleson
and the second of the second	· * TOO THE THE ICOOM!

STAGE NAME.

Knight, George S..... George Sioan.

Legrand, Eugenie... Mrs. Kyrie Bellew.

Lingard, Dickie... Mrs. Dalziel. REAL NAME. Lotta. Charlotte (Tabtree. Lucca, Pauline. Baroness von Walhofen. Maddern, Minnie. Mrs. Legrand White. Mansfield, Richard. Richard Rudersdorff. Mantell, Robert B. Robert Hudson, Mather, Margaret. Mrs. Emil Haberkorn. McHenry, Nellie. Mrs. Websten Mitchell, Maggie. Mrs. Paddock. Modjeska, Mine. Countess Bozenta.
Morris, Clara. Mrs. F. C. Harriott.
Nellson, Adelaide. Mrs. Lee.
Nevada, Emma. Mrs. Dr. Palmer.
Nilsson, Christine. Countess Casa-Miranda.
Palmer, Minnie. Mrs. John R. Rogers. Patti, Adelina......Mme. Nicolini.

STAGE NAME. REAL NAME. ...Mrs. De Munck. Patti. Carlotta... Paulding, Frederick...Frederick Dodge Pixley, Annie......Mrs. Robert Fulford. Prescott, Marie.....Mrs. Pertzel. Prescott, Marie ... Mrs. Pertzel.
Raymond, John T. ... John T. O'Brien.
Rehan, Ada ... ... Ada Crehan.
Rose, Marie ... Mrs. Henry Mapleson.
Russell, Lillian ... Mrs. Edward Solomon.
calchi. Lillian ... Mrs. Edward Solomon.
calchi. Mme ... Countess Lolli.
Stone, Marie ... Mrs. W. H. Macdonald.
Sylvester, Louise ... Mrs. F. A. Mackay.
Templeton, Fay ... Mrs. Wm. West.
Thompson, Lydia ... Mrs. Alex. Henderson.
Tiffany, Annie Ward ... Mrs. Chas. H. Green.
Valleria, Mme ... Mrs. Cetil Clay.
Wainwright, Marie ... Mrs. Louise James.
Weathersby, Eliza ... Mrs. Nat C. Goodwin.

About the English Nobility, Etc.

Of the English nobility, the various ranks, beginning with the lowest, are baron, viscount, earl, marquis, and duke. Every peer is a baron, and every baron is a peer. The title baron is a generic one for noblemen of all ranks. It is never used, however, in addressing a peer. The term "lord" is applied to all peers below the rank of duke. Viscount is the next higher in the scale. Vet he retains is the next higher in the scale. Yet he retains the title of baron. If one were Baron Strat-ford and the title viscount were conferred upon him, he would be Baron Stratford and Viscount Avon, and so on in the upward scale of titles.

Earl is the oldest of English titles. It exists only in England, while all the others abound on the Continent. This was once the highest in the realm. Marquis was unknown in England before 1385. Its chief advantage seems to be that it affords the Crown an opportunity to raise an earl to a higher degree without making him a duke. The latter is the title of making nim a duke. The latter is the tille of highest rank, next to the princes of the blood; and these, except the Crown Prince, or Prince of Wales, are called dukes. The first English duke was Edward, the Black Prince. He was created Duke of Cornwall by his father, Edward III, in 1997 and the older to be a been been seen to be a seen to be Edward III., in 1837, and the oldest son born to the reigning monarch has since been Duke of Cornwall, with the added title of "Prince of Wales." The title of marquis was first bestowed by Richard II. on his favorite, Robert de Vere, Earl of Oxford, created Marquis of Dublin in 1886. The Saxon and Danish titles of ealderman, corle, and thane were changed into earl and baron by William I. The title of viscount was long in use in France before it was bestowed on any person in England. The first person who held it was John Beaumont. created Viscount Beaumont and Count of Boulogne, in France, 1440. The order of bar-

exists only in the British dominions.

All noblemen from baron to duke are addressed as "my lord." The style of a marquis, if specially addressed according to title, is "Most Noble;" that of earls, viscounts, barons, "the Right Honorable;" that of duke, "His Grace the Duke." There is a nobility which comes from office, as in the case of bishops, the Lord Chancellor, and certain judges. With the exception of Lord Chancellor, they are mere titles of courtesy. Knightlor, they are mere titles of courtesy. Knight-hood is not hereditary, but is conferred for

lor, they are mere tires of courtey. Angarhood is not hereditary, but is conferred for special services.

The annuities paid by the British people to the royal family for its support are as follow: The Queen, \$1,925,000; Prince of Wales, \$200,000; Princess of Wales, \$50,000; Crown Princess of Frussia, \$40,000; Duke of Edinburgh, \$125,000; Princess Christine, \$30,000; Princess Louise, \$30,000; Duke of Connaught, \$125,000; Princess Beatrice, \$30,000; Duke of Cambridge (the Queen's cousin), \$26,000; Duchess of Albany, \$30,000; Duchess of Mecklenburg Strelltz (the Queen's cousin), \$15,000. Total, \$2,715,000 per annum.

The number of British subjects entitled to wear a ribbon or badge of the Queen's giving is about 2,000, all told. Of the Garter there are 52 Knights, 31 English and 21 foreign; of the Thistle, 21; of the Order of St. Patrick, 25; of the Bath, 87 Grand Crosses (72 English and 15 foreign), 208 Knights Commanders, and 928 Companions and officers, making a total of

Companions and officers, making a total of 1,223 members of the order; of the Star of India there were recently 261 Knights and Companions: of the Order of St. Michael and St. George, 407; Companions of the Order of the Indian Empire, 177; and last, the Victoria. Crosses, 242.

Human Speech.

The principal European languages spoken by mankind were estimated in 1883 as follow: English, spoken by 99,861,000 people; French, 47,818,000; German, 68,826,000; Italian, 29,873,-47.818,000; German, 68.826,000; Italian, 29.873,000; Spanish 40.835,000; Portuguese, 12,810,000; Russian, 66,725,000. Nearly five times as many persons were speaking English in 1883 as in 1801; and the English-speaking peoples were 27.1 per cent of the whole enumerated, while in 1801 they were but 12.9 per cent of the whole. In all 366,748,000 persons were speaking these languages. "Volapük," proposed as a common language for all the world, is the invention of a German Catholic rulest. the invention of a German Catholic priest, The invention of a German Catholic priest, Father Johan Martin Schleyer, of Constance, Germany. He published his system in 1879. On account of its extreme simplicity, its grammar containing no artificial genders, but a single conjugation, and no irregular verbs,

Volapük is very easily acquired, and large numbers of educated people are learning it all over the Continent and in this country. The Volaptik dictionary now contains 14,000 words, while any imagined new word may be easily formed by composition. All difficulties of pronunciation and spelling are avoided. No sound is employed which is not common. the world over, every word is accented on the last syllable, and the orthography is strictly phonetic.

The average expectancy of life for drunkards and the totally abstinent is respectively as follows: At the age of twenty, 15 and 44 years; thirty, 14 and 38; forty, 11 and 29. The ratio of insane drunkards to all insane persons in the United States is 26 per cent.

#### A Million and a Billion.

Million is a word easily and often carelessly spoken; but it represents, nevertheless, a vast number. Counting incessantly at the rate of number. Counting incessantly at the rate of 100 per minute for ten hours a day, it would take 16% days to count a million, and, resting on Bundays, nearly 31% years to count the population of the United States, now estimated at 63,000,000. An impressive object-lesson may be made, which is especially commended to teachers, in the effort to convey an idea of the greatness of a million. Take a string, tape, or strip of paper 831/2 feet long, and place against a wall or on a large floor. This is just 1000 a wall or on a large floor. This is just 1000 inches in length; and of course, the whole standing for 1,000,000, an inch represents 1000 and a tenth of an inch but 100. Both of these are in themselves respectable numbers; their smallness, as compared with the million, or total length of the string, is exceedingly significant and instructive.

What is a billion? In the French system of notation, also used in the United States, it is a thousand million. But the English system gives the name billion to a million million, and taking it in this grand definition, Sir Henry Bessemer, the famous inventor, who was in the habit of occupying his leisure with curious calculations for the amusement of his grandchil-

dren, tried to convey some idea of the immensity expressed in this little word.

He took it successively as a measure of time, of length, and of height. Selecting the second as a unit to be used in the first calculation, he began with the startling assertion that a billion seconds have not yet elapsed since the com-mencement of the Christian era—nor, indeed, even a sixteenth part of that number. A bli-lion seconds make 31,687 years, 17 days, 22° hours, 45 minutes, and 5 seconds. In regard to length he chose for his unit the English sovereign, a coin of the size of a half-eagle. A chain of a billion sovereigns would be long enough to pass 763 times around the globe; or, suppose all these coins laid side by side, each in contact with its neighbor, it would form about the earth a golden zone fifty-six feet six inches wide. The same chain, were it stretched out straight, would make a line a fraction over out straight, would make a line a fraction over 18,328,445 miles in extent. For measuring height, Sir Henry chose for a unit a single sheet of such paper as that upon which the Loudon Times is printed—a measure of about 1-333 of an inch in thickness. A billion of these thin sheets, pressed out flat and piled vertically upon each other, would attain the altitude of 47,348 miles.

### Swift Railway Runs.

Railway speed is hard to average. An average of a little more than 50 miles per hour is reported as the fastest regular time in the United States. It is made on the Pennsylvania limited in its run from Jersey City to Phila-delphia, 90 miles, in 112 minutes. The Flying Dutchman train is supposed to make the fast-est time in the world, between London and Bristol, 1181/4 miles in less than two hours. But the average of this fast train is only 591/2 miles per hour. There are several other trains noted for remarkably fast time on short distances. Sometimes a straight and even grade for a dis-tance of 20 miles will permit a train to run at the rate of more than a mile a minute. One train on the Canadian Pacific road, from Cotaneau to Ottawa, averages 50 miles an hour for a distance of 78 miles. On the New York Cen-tral road the late Mr. Vanderbilt once traveled at the rate of 90 miles an hour. An average of 361/4 miles an hour is considered fast traveling. But in July, 1885, a train on the West Shore

road made the entire run from East Buffalo to Weehawken, opposite New York, in 7 hours and 23 minutes, an average of 56 miles an hour, running part of the way at the tremendous speed of 87, and at other times 70 to 80 miles per hour. When Stephenson ran his engine in 1825 over the Stockton and Darlington Railway, Eng., at the rate of about six miles an hour, he sent a mounted signalman ahead, to

hour, he sent a mounted signalman ahead, to warn people not to approach the train, while it was running at such formidable speed!

The largest and fastest passenger engine ever built is said to have been turned out of the Rhode Island Locomotive Works, at Providence, for the New York, Providence, and Boston Railroad Company. She was designed to make the run from Providence to Groton, Conn., a distance of 62.5 miles, including a dead stop at Mystic drawbridge, as required by the statutes of Connecticut, in just 62.5 minutes, pulling at the same time eight cars, four of them Pullmans.

### Handy Measurements, Etc.

The following will be found highly useful at | times. They give inside dimensions.

A box 8 2-5 in. by 8 in., and 8 in. deep, con-

tains a peck.

A box 8 in, square, and 416 in, deep, contains a gallon.

A box 7 in. square, and 23/4 in. deep, contains a half-gallon.

A box 4 in. square, and 4 1-5 in. deep, contains a quart.
A box 3 in. square, and 3% in. deep, contains

A box 24 in. by 17 in., and 28 in. deep, con-

tains a barrel. Abox 18 in. by 151/2 in., and 8 in. deep, con-

tains a bushel. A box 131/2 in. square, and 111/2 in. deep, contains a bushel.

A box 12 in. by 111/2 in., and 9 in. deep, contains a half-bushel.

A box 10 in. square, and 103/4 in. deep, contains a half-bushel.

The following shows the length of a tour around the world, starting and ending at Philadelphia: Philadelphia to San Francisco,

3360 miles; San Francisco to Yokohama, 4764; 3930 miles; San Francisco to Yokonama, 4764; Yokohama to Hong Kong, 1630; Hong Kong to Singapore, 1150; Singapore to Calcutta, 1200; Calcutta to Bombay, 1409; Bombay to Aden, 1664; Aden to Suez, 1206; Suez to Alexandria, 250; Alexandria to Marseilles, 1300; Marseilles to Paris, 536; Paris to London, 316; London to Liverpool, 205; Liverpool to Philadelphia, 3050. Total, 22,042 miles.

The wedding celebrations occur as follow: Three days, Sugar; sixty days, Vinegar; Ist anniversary, Iron; 5th anniversary, Wooden; 10th anniversary, Tin; 15th anniversary, Crystal; 20th anniversary, Thi; John anniversary, Crystal; 20th anniversary, China; 25th anniversary, Silver; 30th anniversary, Cotton; 35th anniversary, Linen; 40th anniversary, Woolen; 45th anniversary, Silk; 50th anniversary, Golden; 75th anniversary, Diamond.

Light, delicate, quiet tints or colors with undefined, soft forms of clouds, indicate and accompany fine weather; but gaudy or unusual hues, with hard, definitely outlined clouds, foretell rain, and probably strong

## Sundry Stray Facts.

Books in their present form were invented books in their present form well in the by Attalus, King of Pergamus, in 887. The word pergament, seftened into parchment, came from "Pergamus," because there animal skins were first used in writing.

Paris was known as Lutetia until 1184, when

the name of the great French capital was changed to that which it has borne ever since. • The English guinea was first coined in 1673, and derived its name from the fact that the gold of which it was composed at first came from Guinea rom Guinea.

Tobacco was discovered in San Domingo in 1496, afterwards by the Spaniards in Yucatan in 1520. It was introduced into France in 1560, and into England in 1588.

Coal was used as fuel in England as early as 854, and in 1234 the first charter to dig for it was granted by Henry III. to the inhabitants of Newcastle-on-Tyne.

Of harped settle on the country of the

Of horned cattle only the buffale or bison is a native of this country, and this has never been tamed to much use. Columbus brought the first tame cattle to America,— a bull and

The first English newspaper was the English Mercury, issued in the reign of Queen Elizabeth, in the shape of a pamphlet. The Gazetta, of Venice, was the original model of

the modern newspaper.

The first electrical signal ever transmitted between Europe and America passed over the

Field submarine cable August 5, 1858. The Chinese make candles from wax obtained from the berries of a tree; the wax is fragrant, and yields a bright light.

The origin of the carat—four grains Troy weight—is from the Arabic word "kuara," the name of the seed of a pod-bearing plant.
These seeds were used for weighing against gold-dust, first in Hindostan, and thence over the world.

In the year 1633, a man convicted of drunkenness in Boston was sentenced to attend every day upon the session of the General Court, and there were a great badge of scarlet cloth, with the letter D, signifying drunkard,

inscribed upon it.

The "Seven Champions of Christendom," according to a book written by Richard Johnaccording to a book writen by kindra Jointston in 1600, were St. George of England, St. Denys of France, St. James of Spain, St. Anthony of Italy, St. Andrew of Scotland, St. Patrick of Ireland, and St. David of Wales.

The largest producing farm in the world lies in the southwest corner of Louisiana, and

is owned by a Northern syndicate. It runs one hundred miles north and south. The immense tract is divided into convenient pastures, with stations or ranches every six miles. fencing alone cost nearly \$50,000.

The river Rhine carries to the sea every day

145,980 cubic feet of sand or stone.

A queen-bee will lay 2000 eggs daily for 50 days, and the eggs are hatched in three days. A swarm of bees contains from 10 000 to 20,000 in a natural state; in a hive, from 80,000 to 40.000 bees.

A single female house-fly produces in one season 20.080.320. A wasp's nest usually contains 15,000 or 16.000 cells.

No less than 2900 silkworms are required to produce one pound of silk; but it takes 27,000

repiders to produce one pound of web.

Every pound of cochineal contains 70,000 insects boiled to death, and from 600,000 to 700,000 p. unds are annually brought to Europe for scarlet and crimson dyes.

There is scarcely a boy or man in this country but carries a lead-pencil in his vest pocket. It is estimated that 250,000 pencils are pur-hased every day, or 78,000,000 per year.

Spiders have four paps for spinning their threads, each pap having 1000 holes, and the fine web itself is the union of 4000 threads. No spider ever spins more than four webs, and when the fourth is destroyed they seize on the webs of others.

It has been ascertained by a series of ex-periments that rye and winter wheat germinate at 32 degrees, barley, oats, flax, clover, and the pea at 35, Indian corn at 48, turnips at 32, carrots at 38, and beans at 40. By adding 12 degrees to each of these the best normal temperature of germination is obtained.

temperature of germination is obtained.

Tea was brought to Europe by the Dutch, in 1610. It was used in England only on very rare occasions previous to 1657, and sold as high as \$30, and even \$45 per pound.

Formerly in England, a fine of £50 was imposed on persons advertising a reward with "no questions asked" for the return of things stolen; the printer of the advertisement was also fined a like sum.

There are more than 1700 walled cities in China, and it is estimated that the length of all these walls taken together would exceed 6800 miles; besides, there is the Great Wall separating China from Chinese Tartary, separating China from which is 1500 miles long.

Bees were first brought to Boston, Mass, by the English in 1670, and have since spread over the continent. It is said that the honeybee is never seen in the wilderness of America more than fifty miles in advance of civilization.

A "monkey wrench" is not so named because it is a handy thing to monkey with, or for any kindred reason. Monkey is not its right name at all, but "Moncky." Charles Charles Moncky, the inventor of it, sold his patent for \$2000 and invested the money in a house in Williamsburg, Kings county, N. Y., where he

When Frederick the Great, of Prussia, was a boy only six years old, his father organized for him a soldiers' company of one hundred lads, and when he was fourteen he was made a captain of the Giant Guard, which consisted of 2400 men, the shortest among whom were nearly reven feet high and the tallest almost nine feet. These men had been collected at great expense from every country where they could be found.

The shamrock, adopted by the Irish as a national emblem, was introduced by Patrick M'Alpine, since called Saint Patrick, to represent the Trinity. He was preaching the Christian faith in Ireland to a powerful chief and his people, and when he spoke of one God and of the Trinity, the chief asked him how one could be in three. Saint Patrick imme-diately stooped and plucked a stem of clover, and holding it up before them, bade them there behold one in three.

Brass pins were first used in England by Catharine Howard, queen of Henry VIII. Previously wooden pins had been used, and when the brass ones first were introduced they were considered so nice that it became quite the fashion to give a lady a box of brass pins as a New Year's gift. Sometimes, however, instead of the pins some money was given with which to buy them, and hence to this day allowances which ladies have for their own separate use are called "pin-money." The loftlest active volcano in the world is

Popocatapet! (smoking mountain), thirty-five miles southwest of Pueblo, Mexico. It is 17,784 feet above the sea level, and has a crater three miles in circumference and 1,000

feet deep.

The first iron ore discovered in this country was found in Virginia in 1715.

#### About Canals.

The average cost of making canals per mile was \$48,000 in Great Britain, \$50,000 in France, \$49,000 in the United States, and \$77,000 in Canada. The Imperial Canal in China is the longest in the world, and connects 41 cities situated on its banks. The next in size is the Vishney, in Russia, which includes a part of the river Volga. The Amsterdam Canal, in Holland, cost \$10,000,000, and is 14 miles long. The Chesapeake and Ohio Canal is 191 miles long, and cost the same sum. The Eric Canal is 444 miles long, and cost \$46,000.000. The Pennsylvania Canal with the construction of which Gen. Simon Cameron was prominently identified, cost \$721,700.

The Suez Canal was opened in 1869. It is 26 feet deep, and was 13 years in construction. The tolls average \$4300 per vessel. The saving to commerce, after deducting fees, is estimated at \$10,000,000 annually. It takes 40 hours to make the passage through it. The British Government owns one-fifth of the

mile shares, having bought them from the Khedive in of Egypt in 1876.

The estimated cost of the Panama Canal is \$182,475,000. Its length is to be 46 miles, including a tunnel of four miles, which will be 100 feet wide and 160 feet high. When completed, if it ever is, it will save 10,000 miles in distance between Europe and Pacific ports.

Michigan has two important ship canals. The longest is on the St. Clair Flats, near the head of Lake St. Clair. It is 8300 feet, or a little more than a mile and a half long, 320 feet wide, 16 feet deep, and was built by the General Government 1887-71, at a cost of \$638,550. The canal at the Sault Ste. Marie was built by the State, the first vessel passing its locks June 18, 1855; but in 1881 was bought by the United States and made free of tolls. It is something less than a mile long, but cost about \$1,000,000, and is now being repaired and enlarged at much greater cost. There are also short ship canals on the Keweenaw Peninsula, at Benton Harbor, and elsewhere in the State.

Weights of the Human Body.

According to the London Medical Record, the average weight of boys at birth is a little more, and of girls a little less, than six and a half pounds. For nine years the sexes are nearly equal in their growth; but then the boys range rapidly ahead, so that at twenty they average about 149 pounds, and young women of the same age but 120. At thirty-five a man generally reaches his heaviest, at about 152 pounds; but women slowly increase until fifty, when they average about 128 pounds. Averaging men and women together, at full growth they are about twenty times

as heavy as at birth. The common range of weight for men is 108 to 220 pounds, and for women 88 to 297 pounds; and the average for human beings of all ages and conditions, fat men and little babes, nobles and paupers, saints, sinners, and all, is 100 pounds, very nearly. If admirers of the softer sex make the point that women should be weighed like other jewels, in troy weight instead of avoirdupois, the figures will stand for young men and women of twenty, respectively, at 143 and 110 pounds, instead of 143 and 120, avoirdupois.

Origin of the Gipsies.

The conclusion that the gipsies wandered from India is now almost universally accepted, but when or from what part of India are questions on which few have done more than idly speculate. The identification of the gipsies with the Jats, who in the Punjab alone number 1,300,399, has received the support of many of those whose opinions on such matters must receive the greatest respect. In a metrical paraphrase of Genesis, made by an Austrian monk about 1122, they are noticed as Ishmael.

ites, and their descent thus credited to Hagar. There is a tale extant that the wandering instinct of the gipsy is due to the fact that his ancestors refused to shelter the Virgin and Child in their flight into Egypt. This race has many other names in addition to that of gipsy—such as Bohemians, in France; Ciganos, in Portugal; Gitanos, in Spain; Hiedens, in Holland; Pharaoh-nepek, in Hungary; Tartar, in Denmark and Sweden; Wallachians, in Italy; and Zigeuner, in Germany.

Density of Population.

From the compiled work of the two great German statisticians, Behm and Wagner, it is learned that the average density of population throughout the world is 28 persons to each square mile of land area. In Europe the people are so crowded that 82 of them live on each square mile, or more than eight on each acre; while in Australia and Polynesia, if the land were equally divided, every man, woman, and child would have almost a square

mile to his or herself, and upon some of the reservations of North American Indians the population is almost as sparse. In Asia there are 48 persons to each square mile; in Africa, 1746; and in America, North and South together, 546. When the whole earth becomes as densely populated as Europe now is, the descendants of Adam and Eve will number 4,209,445,600 souls.

#### In One Ton of Coal.

From a single ton of ordinary gas-coal may be produced 1500 pounds of coke, 20 gallons of ammonia water, and 140 pounds of coaltar. By destructive distillation the coaltar will yield 60.6 pounds of pitch, 17 pounds of cressote, 14 pounds heavy oils, 9.5 pounds of naphtha yellow, 6.3 pounds naphthaline, 4.75 pounds naphthol, 2.25 pounds alazarin, 2.4 pounds solvent naphtha, 1.5 pounds phenol, 1.2 pounds solvent naphtha, 1.5 pounds phenol, 1.2 pounds aniline, 0.77 of a pound toluidine, 0.46 of a pound anharacine, and 0.9 of a pound of toluene. From the latter is obtained the new substance known as saccharine, which is 230 mag a preset as the best cane-sugar.

An indelible ink that cannot be erased, even in recipe: To good gall ink add a strong solution of Prussian blue dissolved in distilled water. This will form a writing fluid which cannot be erased without destruction of the paper. The ink will write greenish blue, but afterwards will turn black.

THE following ages have, on the authority of skilled arboriculturists, been attained by trees: Yew, 3200 years; schubertia, 3000; cedar, 2000; oak, 1800; spruce, 1200; lime, 1100; Orienteplane, 1000; walnut, 900; olive and cypr 800; orange, 630; maple, 500; elm, 300.

#### The Metals.

Nearly one hundred metals are now known, most of which are not used in coinage or the arts. No less than fifty-eight elementary subscances, most of them metals, were discovered during the eleven years 1877-87. Metals are classified as light and heavy, some of them, as sodium, potassium, and lithium, being lighter than water, and others, like platinum, os-mium, and iridium (the heaviest substances found), are more than twenty times the weight of water. The former are further classified:

1. Metals of the alkalies—potassium, sodium, cessium, rubidium, lithium, 2. Metals of the alkaline earths—barium, strontium, calcium, magnesium 3. Metals of the true earths aluminum, glucinum, zirconium, yttrium, er-bium, terbium, thorinum, cerium, lanthanum, didymium. The heavy metals are divided into: 1. Metals whose oxides form powerful bases—iron, manganese, chromium, nickel, cobalt, zinc, cadmium, lead, bismuth, copper, uranium, thallfum. 2. Those whose oxides form weak bases or acids—arsenic, antimony, titanium, tantalum, niobium or columbium, tungsten, molybdenum, tin, vanadium, os-mium. 3. Those whose oxides are reduced by heat (noble metals)-mercury, silver, gold, platinum, palladium, iridium, ruthenium, rhodium, limnetum, pelopium, and some very rare metals. Another system of classification divides the metals into sodium, calcium, iron, copper, platinum, and antimony groups.

The ancients had knowledge of seven metals.

viz., gold, silver, copper, tin, iron, lead, and mercury or quicksilver. They were each held sacred to some ruling deity. Homer mentions all except mercury, which was common in the century next before the Christian era. Gold, indestructible, malleable, the richest in color, in its lustre, and its property of not being altered or even affected by the air, has been known from the remotest times. It is the Sol or sun of the alchemists, who represented it by the circle, the emblem of perfection. are drawings of gold-washings on Egyptian are grawings of gond-washings of Egyptems tombs as early as twenty-five hundred years before the Christian era, and fine gold wire was made into ornaments, often found on mummies, by the Egyptians thirty-five hundred the control of dred years ago. It was coined into the heavy daries of Persia and woven into delicate threads that enlivened the flowered stuffs of Babylon. In the earliest days of Greece goldexisted in great abundance in the Levant. Crosus, B. C. 500, coined the golden stater, and about B. C. 207 gold coins were first struck off

at Rome and were denominated aurei.

Silver ranked next to gold. This beautiful metal has been known from the earliest ages, and has always been highly prized for its rarity, beauty, lustre, and prominence, named from the soft light of the moon. It was

Copper came into use next after silver, and before iron. It was called Venus by the au-cients, who gave it the symbol of that planet. The Age of Copper follower the Age of Stone.

For many ages no addition was made to the seven metals which have been briefly described. It was not even suspected that the number could be increased, but toward the end of the thirteenth century antimony was added to the metallic family. It was discovered by Basil Valentine, and is found in Germany and also in India. It is of a silver-white color, with a good deal of lustre, and neither tarnishes nor rusts. It is valued in the arts from its hardness in the making of alloys.

A second metal, bismuth, has been known since 1529. It is readily distinguished by its peculiar reddish lustre and highly crystalline structure. Its principal source is Scherburg, 1 Saxony. It is largely employed in the arts,

but rarely by itself. Pearl powder, used to whiten ladies' faces, contains bismuth, and if its use is persisted in produces a spasmodic

trembling of the face, ending in paralysis.

Zinc is perhaps the most important of the later discovered metals, and may have preceded the others; it was certainly described long before. An obscure passage in Strabo seems to show that a certain stone was round to drop false silver when melted, but there is little to show that this false silver was zinc. It is positive, however, that its alloys were known to the later Romans, for numerous coins have been found containing copper and zinc nearly in the proper proportions to form brass. The origin of the term zinc is lost in obscurity. It was first employed by Basil Valentine, but Paracelsus, who was fond of penetrating to the source of things, was the first to associate the word with a metal possessing the character of zinc.

Platinum, discovered by Ulloa, a Spanish traveler in America, in 1785, is one of the pure metals found only in its native state, in small glistening globules of a gray steel color, though occasionally in masses the size of a pigeon's egg. It is the heaviest form of metal yet known. It does not oxidize in air at any temperature, no single acid has any effect on it, and it is very infusible. It has been coined into money in Russia.

Cobalt is the name of certain demons who were supposed to haunt mines and to manu-facture those ores which looked rich to the eye, but were really of little value. Among these were supposed to be the ores of this metal, and hence its name. It was discovered by Brandt about the middle of the eighteenth century. It is reddish-gray in color, and is of no use in manufactures and the arts, except that beautiful blue and green pigments are produced from its oxides.

Nickel was discovered by Cronstedt in 1751. Pure nickel is a brilliant, silver-white, ductile, malleable metal. It is used as a whitening agent in the manufacture of German silver, has been converted into coin at the United nas ocen converted into coin at the United States mint, and has come largely into use in plating various metals. Our nickel pieces contain seventy-five parts copper and twenty-five parts nickel. The Chinese tutenag also contains nickel, and the paktong of the East Indies is also a composition of which nickel forms a part.

Manganese, made known in 1774 by Scheele and Gann, is one of the heavy metals of which iron may be taken as a representative. It can be highly polished; it is so hard that it will scratch steel and glass.

Arsenic was produced as a metal by Mr. Brandt about 1733, is a very soft, brittle, and eminently poisonous metal of a steel gray color, and is scattered in great abundance over the mineral kingdom, is sometimes found in the free state, but more frequently combined, which with these related at the weed in the chiefly with iron, nickel, etc. It is used in the arts and also as medicine.

In addition to the above there are at least In addition to the above there are at least seventy-five metals, most of them discovered since 1774. The best known of these are tungsten, 1781, by D'Ellingart; palladium and rhodium, by Dr. Wollaston, who first fused platium; potassium, sodium, calcium, barium, and strontium, in 1808, by Sir Humphry Davy; aluminum, in 1828, by Wonler; magnesium, in 1829, by Bussy; and dianium, discovered by Von Kobell, in 1860.

THERE are said to be 14,000 people in London, who make a living by writing books and by contributing to magazines and the daily newspapers.

Some Large Things.

The largest park in the world is that of Versilies, near Paris, where is the finest palace in the world. It is fifty miles in circumference. Palace and park cost \$200,000,000. They are now unoccupied, save as show places. The next greatest park is that surrounding the control of the contro The next greatest park is that surrounding the Queen of England's palace, at Windsor, comprising 3800 acres. The third in extent is Fairmount Park, Philadelphia, with 2740 acres. Other great parks are, in size, in the order named: Water Park, Vienna, 2300 acres; Bois de Boulogne, Paris, 2100; Phoenix Park, Dublin, 1760; Boyal, Munich, 1375; Forest, St. Louis, 1330; South, Chicago, 1055; Golden Gate, San Francisco, 1043; Central Park, New York, 862; and Belle Isle, Detroit, 804. Lincoln Park, Chicago, has 230 acres; Druid Hill, Baltimore, 600; Hyde Park, London, 400; Eden, Chicnati, 216; Shaw's Garden, St. Louis, 109; and Boston Common, 50. The Yellowstone National Park has an area of 3575 square miles.

The largest library in the world is the Bibliotheque National, in Paris, which contains 2,000,000 volumes, and is wonderfully rich in 2,000,000 volumes, and is wonderfully rich in manuscripts. The next largest is that of the British Museum, with 1,500,000 volumes, and the third is the Imperial in St. Petersburg, with 1,190,000 volumes. Other great libraries are: Boyal, Berlin, 700,000: Royal, Dresden, and Royal, Copenhagen, 500,000 each; Royal, Munich, 450,000; Imperial, Vienna, 400,000; Congressional, Washington, 380,000; and University, Leipsic, 380,000. The Boston Public Library is the next largest in America after the Compressional, having, including branches. Lurary is the next largest in America after the Congressional, having, including branches, 335,000 volumes. The Yale Library has 190,000; the Astor, New York, 180,000; the Mercantlle, in Philadelphia, 135,000; the Philadelphia Library, 195,000, and the National, of Mexico, 100,000. The famous Bodleian Library at Oxford University, England, has 330,000 volumes. The loftiest artificial structures in the world are as follow: Washington Manuman.

are as follow: Washington Monument, 555 feet; Philadelphia Public Buildings, 5374; Cologne Cathedral, 511; Great Pyramid, 479; Strasburg Cathedral, 470; Strasburg Cathedral, vielma Catherral, 40; Strasourg Catheral, 40; St. Peter's, Rome, 448; Cremona Cathedral, 386; Florence Cathedral, 380; St. Pau's, London, 385; St. Mark's, Venice, 383; Cathedral, Milan, 350; Victoria Tower, Western Palace, 340; Cathedral, New York, 388; Capitol, Washington, 287; Trinity, New York, 280; Westminster Abbey, 225; Bunker Hill Monument 321

ment, 221.

The weights of the big bells of the world are those at the places named below: At the Kremlin, Moscow, 443,772 pounds; Rangoon, Burma, 291,600; St. Ivan's, Moscow, 127,850; Peking, 120,000; St. Paul's, London, 42,000; Clinuts, Bohemia, 40,320; Vienna, 40,200; Clinuts, Bohemia, 40,320; Vienna, 40,200; Rouen, 40,000; "Bigen," Westminster, 25,620; Erfurt, Saxony, 30,800; Montreal, 28,500; Notre Dame, Paris, 28,670; York, England, 24,080; St. Peter's, Rome, 18,600; "Great Tom," Oxford, 17,024; 'State House, Philadelphia, 13,000; Lewiston, Me., 10,233. The great bell of the Kremlin was probably never hung, but cast on the spot where it still stands. It is 68 feet in circumference on the ground, over 21 feet high, and 23 inches through its thickest part. A large piece is broken out of it

large piece is broken out of it
Weights of the famous diamonds, in carats:
Mattam, 367; Grapd Mogul, 279.9; Orloff,
194.25; Florentine, brilliant, 139.5; Crown of
Portugal, 138.5; Regent of Pitt, 136.75; Star of
the South, 125; Kohl-I-Noor, 106.6; Piggott,
225; Napac, 78.625; Dresden, 78.6; Sancy,
53.5; Eugenie, brilliant, 51; Hope, blue, 48.5;
Polar Star, 40.25. The weight of the Grand
Mogul originally, in the rough, was 900 carats;
of the Kohl-Neur, 726; and of the Star of the
South, 256.8. South, 254.4.

The highest bridge in the world is on an ex-

The highest bridge in the world is on an extension of the Erie Railroad, 15 miles south of Bradford, Pa., across the Kinzna chasm. It is a symmetrical iron structure, 2060 feet long, and the central span is 301 feet high. The largest ship is the Great Eastern. She is 680 feet long, 83 feet broad and 60 feet deep, being 22,927 tons burden, 18,915 gross and 13,344 net register. She was built at Millwall, on the Thames, and was launched January 31, 1857. The great vessel has proved a failure in all respects. and has finally been ary 31, 1857. The great vessel has proved a failure in all respects, and has finally been sold to be broken up.

The largest body of fresh water on the globe is Lake Superior. It is 460 miles long, 160 miles wide at its greatest breadth, and has an area of \$2,000 equare miles. Its mean depth is said to be \$200 feet, and its greatest depth about \$88 feet. Its surface is 603 feet above the sea.

The greatest tunnel in the world is that of St. Gothard, on the line of the railroad between Lucerne and Milan. The summit of the tunnel is 990 feet below the surface at Audermats, and 6,600 feet beneath the peak of Kastelhorn, of the St. Gothard group. The tuntelhorn, of the St. Gothard group. The tun-nel is 2614 feet wide, and 19 feet 10 inches from the floor to the crown of the arched roof. It is 916 miles long — 15-6 miles longer than the Mt. Cenis Tunnel.

The largest trees are in the big-tree groves of California. One of a grove in Tulare county, according to measurement made by members of the State Geological Survey, is 276 feet high, 106 feet in circumference at the base, and 76 feet at a point 12 feet above ground. Some of the trees are 376 feet high and 34 feet in diameter. Some of the largest that have been felled indicate an age of from 2,000 to 2,500 years

The largest inland sea is the Caspian, lying between Europe and Asia. Its greatest length is 760 miles, its greatest breadth 270 miles, and its area 180,000 square miles. Great Salt Lake, in Utah, which may be properly termed an inland sea, is about 90 miles long, and has a varying breadth of from 20 to 25 miles. Its surface is 4,200 feet above the sea, whereas the surface of the Caspian is 84 feet below the

the surface of the Caspian is of local serial cocan level.

The Chinese wall is the largest wall in the world. It was built by the first Emperor of the Tsin dynasty, about 220 B. C., as a protection against Tartars. It traverses the northern boundary of China, and is carried over the highest hills, through the deepest valleys, across rivers and every other natural obacross rivers, and every other natural obstacle. Its length is 1,250 miles. Including a parapet of 5 feet, the total hight of the wall is 20 feet, thickness at the base 25 feet, and at the top 15 feet. Towers or bastions occur at intervals of about 100 could be 100 to 100 to

intervals of about 100 yards.

The highest monolith is the obelisk at Karnak, Egypt, on the east bank of the Nile, near Luxor, occupying a part of the site of an ancient Thebes. The obelisk is ascribed to Hatasu, sister of the Pharaoh Thotmes III. who reigned about 1600 B. C. Its whole length is 122 feet, its weight 400 tons. Its height, without pedestal, is 108 feet 10 inches. The height of the obelisk in Central Park, without pedestal is 68 feet 11 inches, its weight about 168 tons.

The longest span of wire is used for a tele-graph in India over the River Kistnah, between Bezorah and Sectanagrum. It is more than 6000 feet long, and is stretched between two hills, each 1200 feet high.

The largest university in the world is Oxford, It consists of twenty-five colleges and five halls. Oxford was the seat of learning in the time of Edward the Confessor, and claims to have been founded by Alfred.

### Old Superstitions about Cures.

Here is an old remedy for the ague. It | should be written on a three-cornered piece of paper, solemnly read, folded, knotted, and given to a fool: "When Jesus saw ye cross whereon His body should be crucified, His body shook, and ye Jewes asked Him had He the agnet He answere; and said, "Whosoever keepeth this in mind or writing shall not be troubled with fever or ague; 'so, Lord, help Thy servant trusting in Thee." The fool gets the ague, of course, and you recover. However, as fools who are willing to accept the ague are not plentiful, here is another which can be easily tried: "Take a spider, the larger the better, envelop it in dough, re-peating the sixty-fifth Psalm backwards, and swallow it." Persons of weak stomachs find it equally efficacious to put the insect in a bottle and bury it in the road. Another rem-edy is to spread candle-snuff on bread and molasses, and eat it.

For bleeding at the nose kill a toad and wear it around the neck, or get some old woman (Dutch preferred) to repeat these

lines:

Three virgins came over Jordan's land, Each with a bloody knife in her hand;

Stem, blood, stem— Bloody nose [or mouth], in God's name mend! For the bite of a snake, kill the reptile and apply its fat to the wound, and for the bite of

a dog apply its hair.
To cure a burn it was only necessary to breathe on it three times and repeat the following charm, believing of course that it will prove effectual:

There were two angels came from the East;

One brought fire, the other frost.

Out, fire! In, frost!

In the name of the Father, the Son, and the

Holy Ghost! It should be understood that faith is all-important to insure a cure, and those doubting

the efficacy of the remedy will surely be disappointed in finding one.

There were a great many remedies for cramps, one of the simplest being to tie a garter round the left leg below the knee; for cramps in swimming an eel-skin is best. Rings dug out of old graves were deemed infallible, and placing shors under bed covers with the toes sticking out generally cured, as also put-ting them under the bed soles upward, or laying both shoes and stockings crosswise on the floor.

For fits, go into a church at midnight, walk round the communion-table three times, repeating the Lord's prayer, and you will come

out all right.

Children who are failing should eat three roast mice, and this prescription is equally

potent in curing the measles

If you are afflicted with rheumatism carry stolen chestnuts or a potato in the pocket, or wear su-pended from the neck to e foot of a rabbit or a piece of mountain ash. Many people to this day carry a horse-chestnut, or buckeye, in the pocket for rheumatism.

Ringworm was supposed to be cured by rubbing ashes on the part three successive mornings, before breakfast, repeating these lines:

"Ringworm, ringworm red, Never mayest thou spread; But ave grow less and less, And die away among the ash,"

When all other remedies fail to cure scarlet fever and whooping-cough, take a hair from the sufferer and put it down the throat of a

mule, with firm belief in its efficacy.

If yourself or friends are afflicted with rofula, you can be cured by cutting off the

fore-leg and hind-leg of a toad on contrary sides, and wearing them round the neck. The toad must be turned loose, and as it pines and dies so will the disease waste and die, and the person recover.

Sore eyes might be cured by bathing them in pure rain-water, but it can be gathered only in the month of June.

A sprain is cured by tying around it a thread of black wool in which nine knots have been made; and a snake-skin bound on the oppo-site side of the hand will cure a wound made-

by a thorn.

The way to cure the tooth-ache is to take a rusty nail and cut the gum surrounding the tooth until it bleeds, then drive the nail into a tree, and "you shall never have the tooth-ache Wearing a tooth drawn from a corpseis believed by many nowadays to have the

same effect.

Repeating the eighth Psalm over a sick child will cure the thrush, and another remedy for the same disease is to have its mouth breathe into by one of posthumous birth, or insert the bill of a duck into the sufferer's mouth that its cool breath may charm away the disease. Another sure cure is to take three rushes and pass them through the mouth, and then throw them into the water again, and as they float-

away the disease will follow

There are many venerable methods of curing warts One is to take a piece of twine, tie it in as many knots as you have warts, touch each knot with a wart, and then throw the twine behind your back or into a cemetery where it may soon decay, and as it decays the warts will disappear. Another is to rub them. warts will disappear. Another is to rub them with a bean-pod and throw it away, or with a snail and impale it on a thorn, or with a cin-der and drop it at the crossing of two roads. A Massachusetts quack doctor used to "look"

them away. He took the patient by the hand, looked at them a moment, and they slowly disappeared. There is still a way practiced of rubbing them with a bean, and then carefully folding it up and dropping it in the road, be lieving the finder will inherit the warts.

Other old notions are that the left eye of ahedgehog fried in oil produces sleep; that the right foot of a frog in some deer-skin cures the gout; that the leaves of an alder tree on which the sun has not shone are a cure for erysipelas; that a rag tied to the finger and toe-nails of a consumptive person, and then waved three-times round the head, will cure him; that the hair of a child rolled in butter and given to a dog is a remedy for the whooping-cough; that a ring made of communion money drives away convulsions; and that the royal touch in the cure of scrofula is efficacious.

THE average age of cats is reported at 15-years; of squirrels or hares, 7 or 8 years; a bearrarely exceeds 20 years; a dog lives 20 years; a. wolf 20; a fox 14 or 15; lions are long-lived, the one known by the name of Pompey living to the age of 70. Elephants have been known to live to the age of 400 years; pigsto the age of 29; the rhinoceros to 29; a horse to 62, but not often bound 95 on 90 consideration live. often beyond 25 or 30; camels sometimes liveto the age of 100; stags are very long-lived; sheep seldom exceed the age of 10; cows live about 15 years. Cuvier thought it probable that whales sometimes live 1000 years. The dolphing whates sometimes live 100 years. The dolpring and porpoise attain the age of 50; an eagle died; in Vienna at the age of 104; ravens have frequently reached the age of 100; swans have lived to the age of 300. It is said that crows also live to be 100 years old; herons 59; parrots, 60; pelicans and geese, 50; shylarks, 30; sparrow hawks, 40; peacocks, 24. A tertoise has row hawks, 40; peacocks, 24. A tortoise has been known to live to the age of 182 years.

#### Notions About Gems.

In ancient times every precious stone had its special virtue, and the more precious the stone the greater its virtues; hence the many tradi-tions relating to gems. Even Abraham is oreds relating to gems. ited with wearing a precious stone around his when wearing a precious some a cum in neck which preserved him from disease. When the patriarch died, tradition says that God placed this stone in the sun; hence the Hebrew provert, "When the sun rises the disease will abate." This stone is supposed to have been a diamond, for it triumphs over all means employed to subdue it, and is a most powerful talisman when under the planet Mars. It is the symbol of justice, and signifies innocence, constancy, faith, and strength.

The ruby and carbuncle banish sadness, dis-

pel bad dreams, and if misfortune threatens the wearer give warning by a change in the

color, which darkens.

The sapphire when worn by an impure or selfsh person is said to lose its lustre. It is thought that to look at it is good for the eye-

sight.

The emerald will put evil to flight; it bestows knowledge and increases wealth. He who dreams of green gems will become renowned. For this stone to fall from its setting is an ill

The topaz when worn on the left hand will

calm anger and brighten wit.

He who wears an amethyst will become diligent and be a great favorite.

The opal was called by the ancients "pederos—from" puer," a child—and in spite of its bad name has many admirers. Queen Victoria gave to each of her daughters on her marriage an opal, which has in some way broken the spell of bad luck given it by Sir Walter **Scott** 

The turquoise protects by drawing upon itself the evil that threatens its wearer; but this properly belongs only to the gem that has been given, not to one that has been purchased.

The beryl, made fashionable lately by both poet and novelist, is said to protect one against disasters and enemies.

The onyx is the lawyers' stone, for it wins

lawsuits and enriches the wearer.

Coral is thought to be very fortunate to children. It is said by Pierre de Bosnel to lose its color when worn by a person that is ill, and dear old colored mammies used to look at the baby's coral necklace to discover if all was well

Amber is also a child's gem: it will make you strong, and has loving, protective properties which make it a favorite with those who are fortunate enough to possess a string of amber beads.

Pearls signify a torrent of tears.

The gems for the several months are: January—Jacinth or garnet: denotes constancy and fidelity.

February—Amethyst: insures peace of mind.

March - Bloodstone: denotes courage in

April - Sapphire or diamond; signifies penitence and innocence.

May-Emerald: insures a return of affection. -Agate: betokens health and long life. Emerald and chalcedony are also assigned to this month.

July-Ruby or carnelian: insures forgetful-

ness of evils. Onyx is also a July stone.

August—Sardonyx: implies conjugal felicity. September-Chrysolite: preserves from or cures folly.

October—Aquamarine or opal: denotes mis-fortune and hope.

Movember—Topaz: insures fidelity in friend-

hips.

Turquoise or malachite: denotes K. Kyanite.

L. Lynx Sapphire.

stance of life. Ruby and chrysoprase are also December gems.

Nearly the same is expressed in the following rhymes:

JANUARY.

By her who in this month is born No gem save garnets should be worn; They will insure her constancy, True friendship and fidelity.

FEBRUARY.
The February-born will find Sincerity and peace of mind Freedom from passion and from care, if they the amethyst will wear.

MARCH. Who in this world of ours their eyes In March first open shall be wise, In days of peril firm and brave, And wear a bloodstone to their grave.

APRIL.
She who from April dates her years
Diamonds should wear, lest bitter tears For vain repentance flow; this stone Emblem of innocence is known.

Who first beholds the light of day In spring's sweet flowery month of May, And wears an emerald all her life, Shall be a loved and happy wife.

JUNE. Who comes with summer to this earth. And owes to June her day of birth, With ring of agate on her hand, Can health, wealth, and long life command.

JULY. The glowing ruby should adorn Those who in warm July are born; Then will they be exempt and free From love's doubt and anxiety.

August Wear a sardonyx, or for thee No conjugal felicity; The August-born, without this stone 'Tis said must live unloved and lone.

SEPTEMBER. A maiden born when autumn leaves Are rustling in September's breeze A sapphire on her brow should bind; Twill cure diseases of the mind.

OCTOBER. October's child is born for woe, And life's vicissitudes must know; But lay an opal on her breast, And hope will lull those woes to rest.

NOVEMBER. Who first comes to this world below With drear November's fog and snow, Should prize the topaz' amber hue— Emblem of friends and lovers true,

DECEMBER. If cold December gave you birth. The month of snow and ice and mirth, Place on your hand a turquoise blue, Success will bless whate'er you do.

The following is the alphabet of gems:
Amethyst. M, Malachite,
Beryl. N, Natrolite. A. Amethyst. B. Beryl. O, Opal. P, Pyrope. Q, Quartz. R, Ruby. C, Chrysoberyl. D, Diamond. E, Emerald. F, Fire-stone. R. Sapphire.
T. Topaz.
U. Ultramarine.
V. Vesuvianite.
W. Water Sapphire.
X. Xanthite, G, Garnet. H, Hyacinth. I, Idocrase.

Some Origins of Slang.

The slang phrases in regard to "rowing up Salt River" are variously explained. They probably originated when David Crockett, the Kentucky hunter and backwoodsman, was a candidate for Congress. A tricky negro, who was to take him in a canoe to a place fixed for joint discussion with his opponent, left him in in the woods on the headwaters of Salt River and paddled down the stream. Crockett did not appear at the meeting, and the people, thinking him scared, elected his opponent. Two years later he was chosen by a good ma-

"As dead as a door-nail," found in English texts over 500 years old, comes from the

texts over 500 years old, comes from the wooden pin or nail used to secure the door of a hut, which by constant use would become very smooth, hard, dry, and "dead."

To "take one down a peg "comes from an ancient law of King Edgar. To cure the Saxons of their habits of intemperance, he ordered marks or pegs to be put in their huge drinking cups, above which they were not to pour liquor, under severe penalty. The expression means, then, to diminish a man's estimate of himself just as the liquor was abated by a

Sub rosa, or "under the rose," is said to come from the gift by Cupid of a rose to Hippocrates. From this legend arose the practice of suspending a rose over the table while eating, when it was intended that the conversa-

tion must be kept secret.

The explanation of the phrase, "by hook or by crook," is that in the olden time persons entitled to get firewood in the king's forest were limited to such dead branches as they could tear down with "a hook or a crook,

without hurt to his Majesty's tree."
"In spite of his teeth" originated thus: King John of England demanded of a Jew the sum of ten thousand marks, and on being refused ordered that the Israelite should have one of his teeth drawn until he gave his con-sent. The Jew submitted to the loss of seven. and then paid the required sum, "in spite of his teeth.

The slang expression for death, "kicking ne bucket," had its origin from one Boisover, the bucket, who in England a great while ago committed suicide by standing on a bucket till he kicked the bucket from under him. Once upon a time a German music-teacher, giving lessons in England, and hearing of the death of the husband of a lady to whom he had formerly given lessons on the piano, called upon her to offer

his condolence and express the pain he had felt on learning that "her husband had kicked

"To dun," to press for money due, comes from one Joe Dunn, a famous bailiff of Lincoln, the reign of Henry VII. He was so uncommonly successful in collecting money that when a man refused to pay the creditor was asked why he didn't Dunn him. Several derivations of "humbug" have been

roposed. Probably it is a corruption of the Irish words uim bog, pronounced combug, signifying soft copper, pewter, or brass, worthless money, such as was made by James II. at the bublin mint, twenty shillings of which were worth only twopence sterling. At first applied to worthless coin, the word became the general title of anything false or counterfeit.
"On tick" is at least two centuries old.

is corrupted from "on ticket," as a trades-man's bill was called in old times.

The explanation of the proverbial saying about "Hobson's choice" is given by Steele in the "Spectator," No. 509. Hobson kept a livery stable; his stalls being ranged one behind another, counting from the door, each customer was obliged to take the horse which happened to be in the stall nearest the door, this chance fashion of serving being thought

to secure perfect impartiality.
"Humble pie" refers to the days when English forests were stocked with deer, and veni insh forests were stocked with deer, and veni-son pasty was commonly seen on the tables of the wealthy. The inferior or refuse portions of the deer, termed the "umbles," were appro-priated to the poor, who made them into a pie; hence "umble pie" became suggestive de-country and attourable was applied to deep overty, and afterwards was applied to degra-

dations of other kinds.

"A wild-goose chase" was a sort of racing resembling the flying of wild geese, in which, after one horse had gotten the lead, the other was obliged to follow. As the second horse generally exhausted himself in vain efforts to overtake the first, this mode of racing was finally discontinued.

The expression "a feather in his cap," did not signify merely the right to decorate one's self with some token of success, but referred to an ancient custom among the people of Hungary. None but he who had killed a Turk was permitted to adorn himself in this fashion, or to "shew the number of his slaine enemys by the number of fethers in his cappe." The similar phrase to "plume himself," had its source in the same tradition.

### The Great Poet's Rules.

The following is William Cullen Bryant's
"Index Expurgatorius," a list of words which
he would not allow his editors to use in his
paper, the New York Evening Post:
"Above and over, for more than, artiste paper, the New York Evening Post:

"Above and over, for more than; artiste, for artist; aspirant; authoress; beat, for defeat; bagging, for capturing; balance, for remainder; banquet, for dinner or supper; bogus; casket, for coffin; claimed, for asserted; collided; commence, for begin; cortege, for procession; cotemporary, for contemporary; couple for two; darkey, for negro; day before yesterday; debut; decease, as a verb; democracy, applied to a as a verb; democracy, applied to a political party; develop, for expose; devouring element, for fire; donate; employe; indorse, for approve; en route; esq.; graduate, for is graduated; gents, for gentlemen; Hon.; House, for House of Representatives; humbug; inaugurate, for begin; in our midst; item, for particle, extract, or paragraph; is being done, and all passives of this form; jeopardize; ju-bilant, for rejoicing; juvenile, for boy; lady, for wife; last, for latest; lengthy, for long; miency, for lenity; loafer; loan or loaned, for

lend or lent; located; majority, relating to persons or circumstances, for most; Mrs. President, Mrs. Governor, Mrs. General, and all similar titles; mutual, for common; official, all similar titles; mutual, for common; official, for officer; ovation; on yesterday; over his signature; pants, for pantaloons; parties, for persons; partially, for partly; past two weeks, for last two weeks, and all similar expressions relating to a definite time; poetess; portion, for part; posted, for informed; progress, for advance; quite, prefixed to good; large, etc.; raid, for attack; realized, for obtained; reliable for trustworthy; repudiated for relater. raid, for attack; realized, for obtained; relia-ble, for trustworthy; repudiated, for reject or disown; retire, as an active verb; Rev., for the Rev.; role, for part; roughs; rowdies; Secesh; sensation, for noteworthy event; standpoint, for point of view; state, for say; taboo; talent, for talents or ability; talented; tapis; the de-ceased; the United States as a singular nom; transpire, for occur; via for by the way of: transpire. for occur; via, for by the way of; vicinity, for neighborhood; Wall street slang generally, bulls, bears, long, short, flat, corner, tight, moribund, comatose, etc.; which, with a noun, which man; wharves for wharfarwould seem, for seems." which, with

Weights and Measures.

MEASURES OF WEIGHT.—Avoirdupois: 16 drams equal 1 ounce; 16 ounces, 1 pound; 112 drams equai i omce; in ounces, i pound; 113 pounds, 1 hundred weight; 30 hundred weight; 1 ton. Troy: 24 grains equal 1 pennyweight; 20 pennyweights, i ounce; 12 ounces, 1 pound. Apothecaries': 20 grains equal 1 scruple; 8 scruples, 1 dram; 8 drams, 1 ounce; 12 ounces, 1 cached. 1 pound.

1 POUND.

SURPACE OR SQUARE MEASURE.—144 square inches equal 1 square foot; 9 square feet, 1 square yard; 30½ square yards, 1 square rod; 40 square acre; 160 square acres; 1 square rods, 1 square acre; 1 square square acre; 1 square square acre; 1 square square acre; 1 square milli have a square acre within an inch.

MEASURES OF LEWSTH.—A palm is 3 inches:

MEASURES OF LENGTH.—A palm is 8 inches; a hand (horse measure) is 4 inches; a span is 10% inches; a cubit is 2 feet; a pace is 8 feet; a fathom is 6 feet; a great cubit is 11 feet; 16% feet equal 1 rod; 40 rods, 1 furlong; 8 furlongs.

feet equal 1 rod; 40 rods, 1 furions; 8 furions; 3 mile; 30 geographical miles, 1 degree; 1 mile is 5230 feet, or 1760 yards, in length; a league is 3 miles; a day's journey, 334 miles; a Sabbath day's journey in the Bible, 1155 yards. SOLID OR CUBIC MEASURE.—1728 inches equal 1 cubic foot; 27 cubic feet, 1 cubic yard; 40 cubic feet of round timber, 1 ton; 50 cubic feet of hewn timber, 1 ton; 128 cubic feet of wood (4 feet wide, 4 feet high, and 8 feet long), 1 cond; 34 feet light, 1 feet light, 1 feet of stone

cord; 24.75 cubic feet, 1 perch of stone.
HOUSEHOLD WEIGHTS AND MEASURES.—
Wheat flour, 1 pound is 1 quart; Indian meal,
1 pound 2 oz. is 1 quart; butter (soft), 1 pound point 2 oz. is 1 quart; outrer (sort), 1 point is 1 quart; loaf sugar, 1 pound is 1 quart; white sugar, powdered, 1 pound 1 oz. is 1 quart; brown sugar, fine, 1 pound 2 oz. is 1 quart; 10 eggs are 1 pound; flour, 8 quarts are 1 peck; 4 pecks are 1 bushel.

Liquids.—English pint, 20 oz.; American pint, Liquins.—English pint, 200z.; American pint, 16 oz.; 4 gills, 1 pint; 2 pints, 1 quarts, 4 quarts, 11 gallon; tumbler, half pint; common wine-glass, 2 oz.; large wineglass, 4 oz.; common teacup, 7 oz.; 5 table-spoons, 4 oz.; 4 teaspoons, 1 oz. POUNDS PER BUSHEL (mostly as fixed by the law of Michigan).—Wheat. 60; shelled corn. 56; corn in ear, 70; rye, 56; barley, 48; oats, 32; sweet potatoes, 56; potatoes, 60; beans, 60;

The desures.

castor beans, 46; clover seed, 60; timothy seed, 45; flax seed, 56; hemp seed, 44; millet or Hungarian grass seed, 50; blue grass, red top, or orchard grass seed, 14; osage orange seed, 38; peas, 60; turnips, 58; buckwheat, 48; corn meal, 50; apples, 48; dried apples, 22; dried peaches, 28; dried plums, 28; cranberries, 40; onions, 54; mineral coal, 80; charcoal, 30; bran, 20; plastering hair, 8; unslacked lime, 70; Michigan salt, 56; coarse salt, 58.

The following are the numbers of English

Michigan salt, 56; coarse salt, 58.

The following are the numbers of English yards in miles of different nations: Arabian, 2148; Bohemian, 10,187; Brebant, 6082; Burgundy, 6183; Chinese Ills, 623; Dutch, 6395; Danish, 8244; English, United States, 1790; English geographical, 2025; Flemish, 6899; German geographical, 8100; Hamburg, 8244; Hanover, 11,559; Hesse, 10,547; Hungarian, 9118; French (art leagues), 4896; French (marine), 6075; Legal league, 2000 toises, 4283; Irish, 3383; Italian, 2025; Luthenian, 9784; Oldenburg, 10,820; Persian parasang, 6086; Polish (short), 6095; Polish (long), 8101; Portuguese (leguos), 6760; Prussian, 9496; ancient Roman, 1613; modern Roman, 2035; Russian verst, '1167; Saxon, 9905; Scotch, 1984; Silesian, 7083; Spanish (leguas), 4690; Spanish (com), 7416; Swiss, 9166; Swedish, 11,704; Turkey, 1821.

The degrees of heat at which various metals will fuse are given in the Scientific American of collect.

The degrees of heat at which various metals will fuse are given in the Scientific American as follow. They are indicated in degrees of the centigrade thermometer. Tin, 222.5 to 267; bismuth, 241 to 265; lead, 322 to 334; zinc, 411; antimony, 512 (commencing red heat 525, dark-red heat 700, commencing cherry-red heat 900) red litharge, 354 (ful cherry red heat 1000); copper matt, 1002; silver, 1023; lead matt, 1027; black copper, 1027; raw matt, 1047; lead spess, 1062 (dark yellow heat 1100); gold, 1102; copper, 1173 (light glowing 1200, white heat 1300); lead matt slag, 1300; raw slag, 1360; black copper slag, 1345; iron blast furnace cinder, 1390 to 1430 (strong white heat 1400, bright white to 1430 (strong white heat 1400, bright white heat 1500 to 1800); cast iron, 1500 to 1700; wrought iron, 1900 to 2100; platinum, 2534; temperature of porcelain furnace, 2000.

### Famous Inventions.

The following shows the name of inventor and the date of many of the most important inventions of the world:

		DATE.
Air Gun	Marin	1595
Air PumpOtt	o von Guericke	654
Anchor	Anacharsis	594 B. C.
Balloon	Montgolfler	1783
Barometer	Torricelli	1643
Bellows	Anacharsis	593 B. C.
Camera Obscura	Roger Bacon	1297
Cannon	John Owen	1330
Cl	First erected	
Clock	in Padua,11th	century
Compass	The Chinese	1115 B. C.
Cotton Gin	Eli Whitney	1793
Electric Clock	Wheatstone	1840
Floatric Light Six	· Humnh Davv	1813
Engraving	The Chinese	1000 B. C.
Fire Engine	Hautch	1657
Gas	Von Helmont	1625
Glass.	Phœnicians	
GunpowderBe	rthold Schwarz	1320
Hydraulic Press	Jos. Bramah	1796
Lightning Conductor.	Beni, Franklin,	1752
Lithography	Senefelder	1798
Locomotive	Watt	1759
Matches		
Microscope	Tansen	1590
Phonograph	Edison	1877
Photography	Wedgewood	1802
Pino Forte	Christofall	1714
Partnetic Railway	Pinkus	1885
Transport of the second of the		

	14011101191		
	NAME. Stocking Frame Printing	INVENTOR.	DATE.
	Stocking Frame	.Wm. Lee	1589
	Printing.	.Gutenberg	1438
	Sewing Machine	. Elias Howe	1841
	Steamboat	Robert Fulton	1807
	Telegraph	S F B Moreo	1007
	Torpedo Telephone Telephone	Rushnell	1777
	Telephone	Fligha Grow	1111
	Telephone	A G Ball	• • • •
	Telephone	T A Edison	1000
١	Telephone	Tifforbion	1000
ı	Thermometer	Drobbol	1009
ı	Thermometer	.Drebbel	1008

atch—Said to have been first invented at Nuremberg, 1477, although it is affirmed that Robert, King of Scotland, had a watch about 1310. Spring watches have been ascribed to Dr. Hooke, and by some to Huydhars, and the state of ghens, about 1686; the anchor escapement by Clement, 1680; the horizontal watch, by Grahom, 1724; repeating watches by Barlow, in 1676.

A HIVE of 5000 bees produces about 50 lbs, of honey yearly, and multiplies tenfold in five years. Bees eat 20 lbs, of honey in making a pound of wax. The largest bee-owner in the world is Harrison, of California, who has about 7000 swarms, producing 200,000 lbs. annually, worth \$40,000. There are about 70000 hearnwars in this country but they annually, worth \$40,000. There are about 70,000 bee-growers in this country, but they only average 22 lbs. from each of their hives, while in England cases are reported where 120 lbs. have been secured in a single season.

### Etiquette in a Nutshell.

Etiquette may be defined as the common law of society which grows with the growth of society. It is based on principles which lay the foundations for rules: the rules are merely auxiliary to the principles. Rules become necessary in carrying out fundamental social laws, but should never be arbitrary, so that no reason can be given for them. The declaration of the Apostle Paul, in effect that in Rome he did as Romans did, contains the whole,—that is, one should sympathize, so far as his conscience allows, with the society to which he for the time connects himself.

Your Person: Be clean. Bathe often. Don't wear your nails in mourning. If you shave, shave every day if you can, and have your hair trimmed often. Use no hair oil, pomade, or dye; even tooth-powder is doubt-ful. Don't allow yourself a bad breath or bad

odor of any kind.

Dress neatly, though you need not richly, yen patched clothes can be kept clean. Even patched Wear nothing that claims attention or has not some obvious use. If you wear a badge, let it be the smallest and least conspicuous of its kind. If you dress to meet a certain person or company, remember that men notice effects, women details. Don't wear your hat on your ear or the back of your head. Have your shoes clean, if not blacked; but don't stand in public to have them polished.

BEFORE FOLKS: Don't appear with a tooth-

Before Folks: Don't appear with a tooth-pick or anything not food or drink in your mouth, especially if they are eating. Don't yawn, blow your nose, pick your ears, trim or clean your nails, or even sneeze or niccough, if you can help it. An incipient sneeze can be stopped by pinching the bridge of the nose. Don't spit anywhere except in a switchle accept in the cutter, or on the road. suitable vessel, in the gutter, or on the road-way. On no account leave tobacco-juice or the results of hawking on a sidewalk, staircase, or floor.

Throw away your cigar, or put it out, before entering a car, a salesroom. or any other place where a lady is likely to be.

If you enter an office or other room where

the occupant has his hat on, keep yours on, unless a lady is present. If you take off your hat, he must take off his. Always doff your hat in an elevator, and generally under any roof, if a lady is there.

Don't slouch down or lounge outside of your own rooms, nor there if you are entertaining company. Don't make a biped of your chair,

company. Don't make a biped of nor on any account sit astride of it,

Don't stand in a doorway or the middle of a walk, on a staircase or the platform of a car, unless absolutely necessary

ON THE STREET: Keep to the right, unless to give a lady the wall, when she is already near it.

Apologize promptly for any chance col-lision or personal accident of which you are the author,

Don't make your umbrella or cane a weapon of offense to those who walk behind you.

Don't go along with your hands in your pockets, not even in those of your overcoat.

If a lady is with you, don't smoke. She may not object, but others do, and are apt to think you a blackguard. It is better not to smoke at all on a much-frequented street, and certainly not on the platform of a street-car.

If a lady with whom you walk recognizes a friend, lift your hat to him or her. Similarly tip your hat to a lady, whether you know her or not, who recognizes a friend with whom you walk. Raise your hat to a lady when you make an inquiry or do her any service; though perhaps you can draw the line at passing her fare in a street-car or omnibus.

Do not stop a lady to speak with her at any length, but turn and walk with her—only a little way, however, except by permission. To speak with a man, draw him to one side of the walk.

Don't eat anything on the street, or stare fixedly at any person or thing, or turn to gaze at anybody you meet. The most accomplished men and women seem to see nothing, yet see

everything.
Cultivate a philanthropic turn of mind by quietly kicking or picking from the walk banana-rinds, orange-peel, bits of brick, stone, or brush, or other obstructions and possible annoyances. You do "better than you know" in this, and may save some one sad if not fatal injury.
In Company: Remember all before cited as not to be done "before folks."

Never take overcoat (except at New Year's), overshoes, or umbrella into the parlor you visit. You may take hat and cane, if your

visit. You may take nate and came, it you stay is short.

When you shake hands, keep on your glove if you like, unless it is a thick one and easily removed. Take off a mitter always. The lady recognizes you or offers the hand first. unless you are an intimate acquaintance or friendly relations are perfectly well understood, when it is now considered proper for either to "speak first."

An introduction should present the lady to the gentleman, or the inferior to the superior, if of the same sex. If you meet in a friend's house one to whom you have not been introduced, you may speak guardedly to him or her, under the hospitable English rule, "The roof is an introduction."

Don't read to yourself in company, but you may turn quietly the leaves of an album or

book of engravings.

Don't beat "the devil's tattoo" with foot or Don't beat "the devil's tattoo" with foot or fingers, handle your watch-chain or jewelry, or small articles near, change position frequently, or exhibit nervousness in any way.

Don't let your visit become a visitation.

In Conversation: Don't talk about yourself, especially your ills, grievances, and sorrows, except in answer to inquiries. "A bore is one who persists in talking to me about

is one who persists in talking to me about himself, when I want to talk to him about myself." Unless a narrative or other extended statement demands it, a half-minute is usually long enough for a single remark about anything.

Don't scold, complain, chaff, tease, interrupt

contradict, or dispute.

Whispering in company, talking loudly or across another person, or with anything in the mouth or between the lips, is sternly prohibited.

Slang and swearing are not allowed,—not often even in story-telling. But this does not forbid well-recognized idioms and the "gentle-manly slang" which Thackeray nicely dismanly slang" which Thackersy nicely dis-tinguished from low and vulgar expressions. Tell none of the venerable jokes or yarns, or

use hackneyed quotations or proverbs, unless you are sure they will be new to your conver-sationist or the company.

Don't punch or slap your friend when you tell a good thing, nor touch his arm or shoulder to attract attention, if you can do it by a word as well. Regard the person of a lady friend as inviolably sacred.

Don't look at your watch as you talk, except

with apology.

Try to speak with correct pronunciation and syntax, but don't seem to be struggling after them or conscious of them or their absence. The highest art is to conceal art.

AT THE TABLE: Come neatly clad, with nothing of the sloven or shirk about you,—never

ing or the siveles or dressing gown.

Don't take your seat till the ladies are seated, and then sit fairly close to the table.

Let your napkin drop into your lap or across your knee, without any bib-and-tucker spread of it. Use a corner of it, in general, but never any part of it to wipe your nose, mop your brow, or touch any part of your face except mouth and moustache, and maybe chin. Don't leave it finally in a heap upon or under the table; the best form now is to fold it neatly.

Don't eat with your knife, or put it or your fork into any dish but your own. Make no noise over your soup—or anything else for that matter. Do not drink from the saucer, but if your cup is too full you may pour some of its contents into the saucer for a moment, while you drink enough to allow what is in the sau-cer to be returned to the cup. Take out the cer to be returned to the cup. Take out the spoon before you drink, but leave it in the cup when you have finished, as a sign that you want no more. When you send your plate for more food, retain your knife and fork. Don't eat every morsel served you. Butter your bread as you eat it, in broken bits. Don't stretch across another's plate for anything, or ask your neighbor to do a servant's office if a servant be near. Don't spit anything from your mouth, but reject it neatly on a fork or in a spoon. Don't eat with your nose in the plate, or in any manner to attract attention. plate, or in any manner to attract attention, much less disgust; or lounge at table, or put your elbows or otherwise lean upon it, or use a toothpick while engaged with your meal.

AT CHURCH OR PLACES OF AMUSEMENT: Go in time, if possible, or enter very quietly, and if at a concert or other performance in "numbers," take your seat at the end of one. And don't leave, or get up to put on your wraps, or reach for your hat like a schoolboy ready to rish at the word of dismissal, until the exercise is suited and the support of the

cise is fairly and fully over.

Always take off your hat in an art gallery or a public library. Conform for the time be-ing to the rules and practices of the place, ing to the rules and practices of the place, whatever it may be, though their sense or jus-tice may not always be apparent. Be minutely regardful of others' rights, and participate in no talking or other disturbance, any move-ment or scene that will attract undue attention.

In LETTER-WRITING: Don't write loud, any more than you would talk loud. Dashing hands and flourishes, and conceited signatures, are obsolete. Write if you can so that your correspondent can read every word; let at least your signature be clearly legible. If you least your signature be clearly legible. If you write from or to a place of no great note, put the county also in your date-line or address. Don't use soiled or ragged paper, but it need not be superfine, and nowadays not a whole sheet, if a half-sheet answers well your purpose. You need not cherish a silly prejudic against postal-cards, which have their obvious uses; sensible people receive and use them kindly kindly.

Always enclose a stamp, if you write purely on your own business, and expect a reply. If you enclose a stamped envelope or postal-card, it is better not to address it.

ملسائد عمد

It is better not to address it.

Acknowledge promptly invitations, remittances, and favors of any kind. Answer scrupulously everything civiliy written, with evident expectation of an answer; not to do so is as boorish as to refuse notice to a respectful oral remark. Even if you do not find the stamp that should be enclosed, give the benefit of a doubt, and answer all the same. If your renly must be delayed send at once a your reply must be delayed, send at once a brief acknowledgment, with promise of reply. In General: Acknowledge at once any and do this more fully than by the monosyllable, "Thanks." This word is sometimes used with the prefix "No," as in "No, thanks," which makes it somewhat worse than ridiculous, especially when rapidly spoken.

Return early borrowed books or articles of

any sort.

Don't make a fuss over friendly and wellmeant criticism, though it may not be alto-gether sweet to the taste. "Faithful are the wounds of a friend."

Be gentle and considerate towards the ignorant or blunderers in etiquette. Tact and kindness are at no time more necessary. Do not ness are at no time more necessary. Do not notice their errors unless you must, or you are entitled to correct the blunderer, which should be done in private Some of the finest anecdotes of social history illustrate these precepts. Many rules concerning the conduct of gentlemen are equally applicable to that of ladies. Of the two sexes, the latter is usually the more courteous, and has the finer culture. Study the etiquette of occasions. The general rule, for example, that presents at wedding anniversaries must be in their own metal, as tin silver, etc., is suspended at the golden

as tin, silver, etc., is suspended at the golden wedding.

Practice good manners and good speech assiduously, that they may become habitual, and render you seemingly if not nearly uncon-

scious of them.

Remember that the social code changes considerably in so short a time as five years, and don't rely upon your old books of manners. At any time, indeed, consult more the impulse of a right heart and a generous culture than the cold prescriptions of any book.

Mas. Sherwood's Decisions: In ten different books on etiquette which we have consulted we find ten different opinions upon the subject of first calls as between two women.

\* \* The oldest resident, the one most prominent in fashion, should call first; but if there is no such distinction, two women need not forever stand at bay each waiting for the other to call.

A first call from a new acquaintance should be speedily returned. These are formal calls, and should be made in person between the hours of four and six in New York and other large cities. Every town has its own hours for receiving, however.

It is in every sense as complimentary to send a letter by post as by the dirty fingers of a hired messenger. Very few people in this country can afford to send by their own servants, who, again, rarely find the right address. Wadding research are sent any time within

vants, who, again, rarely find the right address. Wedding presents are sent any time within two months before the wedding—the earlier the better, as many brides like to arrange their own tables artistically, if the presents are shown. Also, all brides should write a personal note thanking each giver for his gift, be it large or small. \* \* Gifts which owe their value to the personal taste or industry of the friend who sends are particularly complimentary. A piece of embroidery, a painting, a water-color, are most flattering gifts, as they a water-color, are most flattering gifts, as they betoken a long and predetermined interest.

Complimentary mourning [black silk with-out crape] should be, as in the French custom, limited to two or three weeks. The health of a delicate child has been known to be seriously affected by the constant spectacle of his

mother in deep mourning.

The primary business of society is to bring together the various elements of which it is made up: its strongest motive should be to lighten up the momentous business of life by an easy and friendly intercourse and interchange of ideas.

Broiled fish, broiled chicken, broiled ham, broiled steaks and chops, are always satisfactory. The gridiron made St. Lawrence fit for heaven, and its qualities have been elevating and refining ever since.

#### Household Hints.

Excellent whitewash: Sixteen lbs. of Paris white and 16 lb. of glue. The glue should be covered with cold water at night and in the morning heated without scorching until dis-solved. The Paris white is stirred in with hot water to give it the proper consistency for ap-plying to walls, and the dissolved glue is then added and thoroughly mixed. It is applied with a brush like the common lime whitewash. Except on very dark and smoky walls, a sin-gle coat is sufficient.

Cements for glass, porcelain, or china-ware, etc.: To mend china-ware take a very thick solution of gum-arabic, and stir into it plaster of Paris until the mixture is of proper con-sistency. Apply it with a brush to the frac-tured edges of the china-ware, and stick them together. In a few days it will be impossible to break the article in the same place. whiteness of the cement renders it doubly valuable. Another method of making cement (which must be used when fresh) is to add to five parts of a solution of gelatine one part of a solution of acid chromate of lime. The articles, after the broken surfaces have been united with this cement, must be exposed to strong sunlight for a few hours, and meanwhile should be held in proper position under considerable pressure from a wire or string. Still another good cement for mending almost anything may be made by mixing together litharge and glycerine to the consistency of thick cream or fresh putty. This is useful for mending stone jars or any coarse earthen-ware, stopping leaks in seams of tin pans or wash-boilers, cracks and holes in iron tea-kettles, etc. In all cases articles mended should not be used until the cement is hardened, which will require from one day to a week, according to the quantity used. This cement according to the quantity used. This cement will resist the action of water, hot or cold, acids, and almost any degree of heat.

For mildewed linen or cotton goods: Plaster all the mildewed spots with ripe tomatoes, and lay the garment on the grass in the sun. At night spread on more mashed tomatoes, and lay it back on the grass. If the case is very obstinate repeat it several times, turning occasionally to air and dry. Or try the following: Soap and pulverized chalk spread over mildewed spots on linen and laid in the sun will remove the mildew without any injury to the material. The juice of a lemon added

will hasten the cure.

To remove ink from carpets: Take up as much as possible with a spoon, pour cold sweet milk upon the spot, and take up with a spoon until the milk is only faintly tinged with ink, then wash with cold water and wipe dry. Auy stain upon carpets can in most cases be removed with ox-gall, after the carpets have been taken up and well beaten. The oxhave been taken up and well beaten. The ox-gall, which you can get from your butcher, should be applied to the stain, especially if it be a grease stain, with an old tooth-brush, and allowed to remain on a few hours. well with flannel and warm water.

Whenever ink is spilled, take salt at once and pile it on the place. When saturated remove it, and use fresh. It will take out every trace of ink, even from the purest marble.

Bottles may be cleaned on the inside by rinsing out with a little muriatic acid. Windows and mirrors may be cleaned by putting a little ammonia ou a piece of paper and polishing after the paper-rubbing by using a chamois-skin.

Before using new glass or earthen-ware place in a boiler with cold water, and heat gradually till it boils; then let it remain until the water is cold. It will not be liable to crack if treated

in this manner.

Holding white cotton or linen over the fumes Holding winter cotton or linen over the rumes of burning sulphur, and wetting in warm chlorine water, will take out wine or fruit stains. The sconer the remedy is applied after any of these spots or stains are discovered the more effectual the restoration. A simpler and more effectual way, used before the fabric is washed in soap or wet, is to pour boiling water on the spots, repeating if necessary two or more times.

or more times. Process for washing linen: Two pounds of soap are dissolved in about five gallons of water as hot as the hand can bear. To this are added one tablespoonful of oil of turpen-tine, and three of liquid ammonia. This mixtine, and three of liquid ammonia. tine, and three of induid ammonia. This mix-ture is then well stirred, and in it the clothes are steeped for three hours, the washtub be-ing covered up as carefully as possible. Next the clothes are washed, rinsed, and blued as usual. The mixture will serve a second time, only it must be re-heated and one half-spoonful of oil of turpentine and one and one half of ammonia added to it.

How a black and white print was washed: A sufficient quantity of water was put in a wash-boiler and heated to the boiling point. There were then dissolved in it 50 grams red chromate of potash, 80 grams common salt, and 60 grams crystals of sal soda. The dress was put into this hot bath for five minutes and frequently turned and stirred, and then washed in clean water until the white spots

wasned in clean water until the white spots appeared perfectly bright and clear. To clean lace: Draw a stocking tightly over a bottle and tie the ends. Lay the lace smoothly over the stocking and tack it in place. Fill the bottle with cold water and put it in a kettle of cold water with shavings of soap in it; set over the fire and boll. If necessary charge the water and repeat the process in it; set over the fire and boil. If necessary change the water and repeat the process. Rinse in warm water and in cold, and set away to drain and dry. Then remove the lace from the bottle, lay it between folds of papers, and press in a large book or under a weight. In cleaning black lace, wash it in skimmed milk; do not rub it, but constantly squeeze it softly. When it seems clean take it out, and put it was little clean milk along the lace in the late of the lace of the late of into a little clean milk, also skimmed, give it another sque ze, and lay it out directly on sheets of stout paper; touch it here and there with the fingers to draw out the scallops and edges, lay the sheets of paper over the lace, and a heavy weight over all till dry. If laid on any-thing soft, the moisture is absorbed, and the lace will not look so fresh.

If one ounce of powdered gum tragacanth be mixed in the whites of six eggs, well beaten, and applied to a window, it will pre-vent the rays of the sun from penetrating.

#### Two Natural Compasses.

Allen Thompson, the old White Mountain guide, says; "When I am in the woods I neveuse a compass. In fact, I don't need any. There are three sure ways that I have for find ing out the points of the compass. You will notice that three-fourths of the moss on trees grows on the north side; the heaviest boughs on spruce trees are always on the south side; and thirdly, the topmost twig on every unin-jured hemlock tree tips to the east. You just

remember this, and you'll never get lost."
At any hour during the daytime, even in a dense fog or blinding snow-storm the right direction may readily be ascertained by a very simple means of finding the position of the sun. All that is required is to place the point of a knife-blade or of a sharp lead-pencil on the thumb-nail, when a shadow will be cast directly from the sun, however dense may be the fog or snow.

#### The Great Discoveries.

GEOGRAPHICAL

861 A. D.-The Faroe Islands, by the Nor-

wegians. 871—Iceland, by Norwegian chiefs. 980—Greenland, by Icelanders. 1000—Winenland (Vinland or Wineland, supposed to be a part of North America), by the same.

1330—The Canary Isles, by the French. 1344—Madeira, by Robert Macham, an Eng-

lishman

1384—Guinea, by English sailors. 1439—The Azores, by Vanderberg, a Fleming. 1449—Cape Verde Islands, by De Noli, for

Portugal.
1481—The Congo, by the Portuguese.
1483—Cape of Good Hope, by Diaz.
1492—The Bahamas and the West Indies, by Columbus, for Spain.

1497-Newfoundland, by John Cabot, an Englishman

١

1498—Continent of America reached by Co-lumbus, and Coast of Malabar and Mozam-bique by Vasco di Gama. 1500—Brazil, by De Cabral, a Portuguese. 1501—Labrador and the St. Lawrence, by

Cortereal, a Portuguese.

1502—St. Helena, by De Nova, a Portuguese.

1505—Ceylon, by the Portuguese.

1506—Madagascar, by Almeida, a Portuguese, 1509—Sumatra, by Sigueira, a Portuguese. 1510-The Molucca and Sunda Isles, by the Portuguese.

1512—Florida, by Ponce de Leon, a Spaniard. 1513—Borneo, by the Portuguese; the Pacific Ocean, or South Sea, by Balboa, and Peru, by De la Rua, both Spanish. 1516—The Rio de la Plata, by De Solis, a

Spaniard.

Spaniard.

1518—Mexico, by the Spanish.

1519—Straits of Magellan and Terra del Fuego, by Magellan, for Spain.

1520—The Ladrones, by Magellan.

1521—The Philippine Islands, by the same.

1527—New Guinea, by Saavedra, a Spaniard.

1535—California, by Cortez, a Spaniard.

1537—Chili, by Almagro, a Spaniard.

1542—Japan, by the Portuguese.

1552—Spitzbergen, by the English.

1553—The White Sea, by Chancellor, an Englishman.

lishman.

-Solomon's Isles, by Mendana, a Spaniard 1576-Frobisher's Strait, by Frobisher, an

Englishman. 1577-New Albion (northwest coast of Amer-

ica), by Drake, an Englishman. 1585—Davis's Strait, by Davis, an English-

man. -Falkland Islands, by Hawkins, an Eng-

lishman. 1595—Marquesas and Solitary Islands, by Mendana.

1606-Australia, by the Dutch. The New

Hebrides, by Quiros, a Spaniard.

1607—Hudson's Bay, by Henry Hudson, an Englishman. Chesapeake Bay, by Capt. John Smith, an Englishman.

1615-Straits of Le Maire, by Le Maire, a Dutchman.

<u>.:...</u>

Dutchman.

1616—Cape Horn, by Le Maire and Schouten.

Baffin's Bay, by Wm. Baffin, an Englishman.

1636—New Zealand and Van Diemen's Land,

now Tasmania, by Tasman, a Dutchman.

1636—Easter Island, by Roggewein, Dutch.

1630—Kamtchatka, by Morosko, a Cossack.

1639—New Britain, by Dampier, English.

1738—Behring's Strait, by Behring, a Dane.

1741—Aleutian Islands, by the same.

1755—Duke of York's Island and Isles of Dancer.

1765—Duke on York's Island and Isles of Dancer.

1765—Duke on Renglishman.

anger, by Byron, an Englishman. 1767—Otaheite, by Wallis, an Englishman.

1768—Cook's Strait, by Capt. Cook, English. 1770—New South Wales, by the same. 1772—Island of Desolation, by Kerguelen, a

Frenchman.

1774—New Caledonia, by Capt. Cook. 1778—The Icy Cape and the Sandwich Is-

1707—Bass's Straits, by Bass, an Englishman. 1819—New South Shetland, by Smith, an

Englishman.
1840 -Antarctic Continent, by Capt. Wilkes,

an American. 1850 - Northwest Passage, by Capt. McClure.

an Englishman

an Englishman. 1863—The Victoria Nyanza (source of the Nile), by Speke and Grant, Englishmen. 1864—The Albert Nyanza, by Baker, an

Englishman. 1877—Identity of the Lualaba and the Congo, by Stanley, an American.

SCIENTIFIC.\*

600 B. C.-Solstices and equinoxes marked out, by Thales.
570—Phases of the moon explained, Anax-

imander.

anter. 450—Eclipses explained, Anaxagoras. 367—Lunar eclipses observed at Babylon. 357—Rotundity of the earth asserted, Aristotle.

336—Cycle of eclipses calculated. 270—Celestial constellations described, by

Aratus.

130—Precession of the equinox, eclipses calculated, Hipparchus.

900 A. D.—Length of year calculated, Alba-

tegrius.

1008—Astronomical tables, Ebn Junis.

1030—True theory of vision, refraction of light, magnifying power of the convex lens, Alhazen

1606-Power of electricity and electrical con-

ductors, Gilbert. 1609—Jupiter's satellites, phases of Venus, secondary light of the Moon, Galfico. Kep-ler's first two laws (third law, 1618).

1611—Logarithms, Napier. 1619—Circulation of the blood, Harvey. 1621—Law of refraction of light, Snellius. 1622—Kepler's law of the celestial motions.

The lacteals, Asellius.

1639—Transit of Venus, Horrox. 1646—Physical theory of vortices, Descartes. Weight of air, Torricelli.

1659 -Motion of the chyle, Pecquet

1659-Saturn's ring and one satellite, Huy-

ghens.

1661—Malpighian layer of the skin, Malpighi, 1666—Compound nature of light, Newton, 1670—"Fire-air" (oxygen), Mayow. Redis-covered by Priestley in 1774, and Scheele in 1775.

1676-Velocity of light, Römer.

1677—Animalcules, Leeuwenhoeck. 1678—Undulatory theory of light and laws of double refraction. Huyghens

1682-Law of the attraction of gravitation. Newton.

1697--Phlogistic theory, Beccher and Stall. -Prussic acid, Diesbach.

1709-1729-Aberration of light, Bradley

1735—Two kinds of electricity, Dufay. 1745—Leyden jar, Cusæus. 1750—Electricity in lightning, Franklin. 1760—Latent heat, Black.

1761-Sun's distance measured by transit of Venus.

1766—Hydrogen, Cavendish. 1781—The planet Uranus (Herschel, or the Georgium Sidus), Wm. Herschel.

\*To the end of the Middle Ages these dates are only approximate.

1783-Rotation of the binary stars, Her-

Star-clusters and nebulæ, motion of solar system towards Hercules, Herschel.

1789—Animal electricity, Galvani. 1790—Radiation of heat, Prevost.

1790—Radiation of heat, Trevost. Meta-morphosis of plants, Goethe. 1800—Dark heat rays, Herschel. Voltaic pile, Volta. 1801—Law of evaporation, Dalton. Chemical rays, Ritter Interference of light, Young. Minor planet or asteroid Ceres, Plazzi. (Palias

minor pianet or asteroid ceres, riazzi. (rallas by Olbers, 1802; Juno, Harding, 1804; Vesta, Olbers, 1807; Astræa, 1845; Hebe, Iris, and Flora, 1847; Metis, 1848; Hygela, 1849; Parthenope, Victoria, Egeria, 1850; Irene, Eunomia, 1851; eight in 1852, and many others since.) 1806-

 Electro-chemical action (electrolysis), Davy.

1808—Law of multiple proportions in chemical compounds, theory of atoms, Dalton. Polarization of light by reflection, Malus. 1811—Conduction of heat, Fourier. 1812—Former periods of life on the globe,

Cuvier.

1820-Electro-magnetism, Oersted. Electrodynamics, Ampere.

1822-Spectrum analysis, John Herschel.

Thermo electricity, Seebeck.

1828—Embryology, Von Baer.

1830—Rocks formed by natural causes still going on, Lyell.
1832—Laws of magneto-electric induction,

Faraday. 1834—Polarization of heat, Forbes. 1840—The glacial period in geology, Agassiz. 1846—Planet Neptune, Le Verrier, Adams, and Challis.

1847-Antiquity of man, De Perthes.

1832-72—Intermediate fossil forms. 1853—The Swiss lake-dwellings. 1858—Theory of natural selection, Darwin nd Wallace. The electric light. and Wallace.

1859—Connection of sun-spots and the earth's magnetism

1860—Periodicity of sun-spots, Schwabe. 1861—Metals in sun and stars, by spectrum analysis. Meaning of lines in the spectrum, Bunsen and Kirchhoff.

1812—Former periods of life on the globe, twier.

1862—Spectrum of falling stars, A. Herschel.

1862—Spectrum of falling stars, A. Herschel.

1862—66—Orbits of comets and meteor systems, Schiaparelli, Adams, and Le Verrier.

#### The Paradoxes of Science.

The water which drowns us, a fluent stream, can be walked upon as ice. The bullet which, when fired from a musket, carries death, will be harmless if ground to dust before being fired. The crystalized part of the oil of roses, so graceful in its fragrance, - a solid at ordinary temperatures, though readily volatile, is a compound substance, containing exactly the same elements, and in exactly the same proportions, as the gas with which we light our streets. The tra which we daily drink with benefit and pleasure produces palpitations, nervous tremblings, and even paralysis, if taken in excess; yet the peculiar organic agent called theine, to which tea owes its qualities, may be taken by itself (as theine,

not as tea) without any appreciable effect. The water which will allay our burning thirst augments it when congealed into snow, so that it is stated by explorers of the Arctic regions that the natives "prefer enduring the tutmost extremity of thirst rather than attempt to remove it by eating snow." Yet if the snow be melted it becomes drinkable water. Nevertheless, although if melted before entering the mouth it assuages thirst like other water, when melted in the mouth it has the opposite effect. To render this paradox more striking, we have only to remember that ice, which melts more slowly in the mouth, is very efficient in allaying thirst.

### Flowers that Sleep.

Almost all flowers sleep during the night. The marigold goes to bed with the sun, and with him rises weeping. Many plants are so sensitive, that they close their leaves during the passage of a cloud. The dandelion opens at five or six in the morning, and shuts at nine in the evening. The graft's-beard wakes at three in the morning, and shuts at five or six in the evening. The English daisy shuts up its blossoms in the evening, and opens its "day's eye" to mert the early beams of the morning sun The crocus, tulip, and many others, close their blossoms at different hours

toward the evening. The ivy-leaved lettuce opens at eight in the morning, and closes forever at four in the afternoon. The night-flowering cereus turns night into day. It begins to expand its magnificent sweet scented blossoms in the twilight; it is full-blown at midnight, and closes, never to open The night again, with the dawn of day. In a cloverfield not a leaf opens till after sunrise. Those plants which seem to be awake all night have been called "the bats and owls of the vege-table kingdom."

### Strengths of

The food eaten supplies the body with either sarmth or strength Most articles yield both warmth or strength to a greater or less extent, but some warmth only and no strength. From this table will be seen how little service alcoholic drinks are to the body. The first column gives the num-ber of grains of strength yielded by one pound of the substance named; the second, the warmth.

Reer or porter	1	815
Parsnips	12	425
Potatoes	24	770
Skimmed milk	84	851
New milk	85	878
	70	2750
Rice	78	4200
		8100
Fresh pork	105	2800
Corn meal	120	980
Fresh fish	129	900

Food.		
Oatmeal	140	975
Fresh Beef	172	2300
Cheddar cheese		2500
Skim-milk cheese		2350

APPARENTLY the Cherokee language supplies the longest existing word in "wi lawtgegina-liskawlungtanawnelitisesti," which means, "They will by that time have nearly done granting (favors) rom a distance to them and to me." And according to the same writer to me." And according to the same writer, "honorificabilitudinity" is the longest word in English literature. In Aztec an equally formidable combination of yowels and consonants exists. It is "amarlacuilolitquitest-laxlabuilli," and it means "payment received for having been bearer of a paper with writing on it."

The Saints of the Church number many thousands, of whom comparatively few have historical importance, or appear in works of fine art. They are in six classes,—apostles and evangelists, martyrs, confessors (formerly the steadfast and courageous in maintaining their faith, though not martyrs; later, those specially eminent for sanctity), scholars distinguished in sacred lore, virgins, and disally matrons and widows famous for holy living. The first recorded bestowment of saintly honors was by Pope John XVI. upon Ulric, Bishop of Augsburg, in the year 933. The ceremonies of canonization are exceedingly impressive and imposing, and often cost The Saints of the Church number many ingly impressive and imposing, and often cost \$100,000 or more. They occur in St. Peter's Cathedral, at Rome, which is superbly decorated for the occasion. Besides the great rated for the occasion. Besides the great apostles, evangelists, and New Testament writers, the principal Saints of the first century are Joseph, father of our Lord; Anne, reputed mother of the Virgin; Stephen the Marty, Nicodemus, Gamaliel, Joseph of Arimatica, Philemon, Onesimus, Martha, Mary Magdalene, Veronica, and others. The most renowned of later Saints are as follow:
Adalbert, 939-97, Bishop of Prague and

apostle of the Prussians.

Ambrose, 340-397, Bishop and patron Saint of Milan, where the Ambrosian Library is named from him. Some of his hymns are still sung.

Anselm, 1038-1109, Archbishop of Canter-bury and eminent philosopher and writer.

Anthony, 251–356, founder of the first society of monks, and so of monasteries. Erysipelas was formerly called St. Anthony's fire, be-cause cured by him. Also St. A. of Padua, 1195-1231.

Athanasius, 296-873, illustrious church father and voluminous writer, Archbishop of Alex-andria and reputed author of the Athanasian

Augustine, 354-430, great scholar, preacher, writer, and Bishop of Hippo, Africa. His "Confessions" and "City of God" are still Also St. A., apostle of England, much read. died about 614.

Barbara, martyr, third century. Behedict, 480-543, founder of the order of the Benedictines.

Bernard, 1091-1153, Abbot of Clairvaux. Founded 160 monasteries, and wrote much. His hymns, also those of B. of Cluny, 1122-56, are often sung in Protestant as well as Catholic churches.

Boniface, 680-755, apostle of Germany and

Archbishop of Mentz.
Caius, 283-96, Bishop of Rome.
Catherine of Alexandria, known in art as Catherine of the Wheel, martyr about 307; also St. C of Genoa, 1448-1510, and St. C. of Sienna, 1347-80, both devotional writers.

Cecilia, martyr of second century, patroness of musicians.

Christopher, supposed martyr of third century, said to have taken his name, "the Christbearer," from carrying the Saviour across a turbulent stream.

Chrysostom ("Golden-mouthed," from his superb oratory), 850-407, Archbishop of Constantinople.

Saints of the Roman Catholic Church.

Clement of Alexandria, d. about 220, church father

Clotilda, died 545, wife of Clovis, King of

Columba, 520-97, apostle of the Highlanders.

Columban, 540-615, eminent Irish monk. Cuthbert, d. about 686, Archbishop of Dur-ham, "the Thaumaturgus [wonder-worker] of

Denys or Denis, martyr ab. 272, first Bishop of Paris and patron Saint of France. Dominic, 1170-1221, founder of the order of Dominicans, the Preaching or Black Friars. Dunstan, 925-88, Archbishop of Canterbury. Edward the Confessor, 1004-66, King of

England.

Elizabeth of Hungary, 1207-31, daughter of

Andrew, King of Hungary.
Francis of Assisi, 1182-1226, founder of the order of Franciscans.

Gallus, 550-646, apostle of the Swiss. George, patron Saint of England and of Russia. His story is much beclouded, and most of it is probably unhistorical.

Germain, 380-448, Bishop of Auzerre, France, Gregory Nazianzen, 328-89, Bishop of Constantinople and celebrated church father.

Statistics and celebrated Church father. Also St. G., born 257, first Patriarch of Armenia; St. G. of Nyssa, 322-94, church father; St. G. of Tours, 540-93, father of French history, and St. G. Thaumaturgus, 210-70,

history, and St. G. Thaumaturgus, 210-70, Bishop of Neo-Cæsarea.
Helena, 250-327, mother of Constantine the Great, built the churches of the Holy Sepulchre and of the Nativity.
Henry II., 972-1024, Emperor of Germany. Ignatius, martyr ab. 107, Bishop of Antioch by appointment of Peter or John. Also St. I., 798-878, Patriarch of Constantinople, son of the Emperor; and St. I. of Loyola, 1491-1556, founder of the Jesuits, or Society of Jesus. The French form, St. Ignace, gives the name to one of our Upper Peninsular cities.

Jerome, 340-430, learned church father and translator of the Vulgate version of the Scriptures.

Scriptures. Lawrence, martyr of the gridiron, third

Louis IX., 1215-70, King of France, active in

the seventh and eighth crusades.
Pachomius, 292-348, Egyptian ascetic, reputed founder of regular monastic communities

Patrick, about 872-454, apostle and patron Saint of Ireland.

Paulinus, 353-431, Bishop of Nola and writer. Also St. P., 722-644, Patriarch of Aquileia. Polycarp, martyr about 166, church father

and Bishop of Smyrna.

Remy or Remi, 439-583, apos Franks and Archbishop of Rheims apostle of the

Franks and Archdishop of Kneims.
Simeon Stylites (Simeon of the Pillar), about
390-460, celebrated for living many years on
top of a pillar in the desert near Antioch.
Stephen, 979-1039, King of Hungary. Also
St. S. of Muret. 1048-1124, French monk.
Thomas of Aquinas, "the Angelic Doctor,"

1925-74, great scholastic teacher and writer. Also St. T. a Becket, 1117-70, Archbishop of Canterbury, murdered at the altar. Xavier, Francis, 1506-52, celebrated Jesuit

missionary and apostle to the Indies.

#### The Greek Catholic Church.

Hany of the Roman Catholic Saints are also saints in the Greek or Eastern Church, which styles itself "the Holy Orthodox, Catholic, and Apostolic Church." It is the result of a schlam between the Greek and Latin Churches. dating from the middle of the ninth century; is the established church in Russia and Greece, and has many followers in the Ottoman,

the Western Asiatic, and North-African countries including Abyssinia and Nubia. There is a Greek church in New York City, and others in Alaska

The Greek Catholics receive as authoritative the decisions of the first seven General Councils of the Roman or Western church, but reject the later, as also the authority of the

Pope. Its head (except of the Russian branch, where the Czar is primate) is the Patriarch of Constantinople, and other Patriarchs are those of Alexandria, Jerusalem, and Antioch. Under them are the metropolitans, archbishops, and bishops, who with the Patriarchs are chosen only from the Greek monks. Below these the priestly orders are archimandrites (in general charge of convents), abbots, arch-priests, priests, deacons, under-deacons, chanters, and lecturers. The principal peculiarities of the Church are these: Baptism is by trine immersion, the subject being wholly submerged once for each person of the Trinity, and children are baptized at three to eighteen years of age, when they receive the sacrament of the Lord's Supper at once. The Church grants no indulgences, and claims no infallibility for its ecclesiastical heads. It denies purgatory, yet its followers pray for the dead, lest God may not have mercy upon them at the final judgment.

They invoke the saints, not as deities, but as intercessors with God, and have many images and pictures of them in their houses and courches. They do not number among the sacraments matrinony, confirmation, and extreme unction, and refuse divine authority to auricular confession, while they admit it as a positive injunction of the Church. They do not worship the symbols of the eucharist, ad-minister communion in both kinds to the laity, whether duly confessed or not, holding that a lively faith is all that is necessary to the worthy reception of the elements, and affirming consubstantiation, or the union of Christ's body with the sacramental bread and wine. The Holy Ghost, in their creed, proceeds only from the Father—an old and exceedingly vexing topic of controversy. They believe in predestination, and allow priests to retain wives married before they take holy orders, but disapprove of all future marriages.

Some Simple Remedies.

For removing freckles and tan: Three table-spoonfuls of fresh scraped horse-radish or good cider vinegar; one pint of buttermilk. Soak six or eight hours, shaking occasionally. Apply at night, and leave ou till morning. Or: Two tablespoonfuls of lemon juice; an equal quantity of water; one tablespoonful of glycerine, and a heaping tablespoonful of powdered borax. Apply three or four times a day, drying carefully, after fifteen or twenty minutes, with a soft towel.

For chilblains: A hot and cold foot-bath every night before retiring, followed by rubbing with lemon juice or an ointment made of 10 drops of carbolic acid to an ounce of vase-

line or lard.

Bruises should have alternate hot and cold applications. To prevent discoloration, apply equal parts of alcohol and water or a lotion of salt and vinegar. When ther a poultice should be applied. When there is suppuration,

Sprains require hot applications first, to relieve pain. Afterwards cold applications will hinder inflammation.

Earache can best be relieved, not by dropping oil, molasses, laudanum, etc., into the ear, but by very hot compresses over the entire side of the head and around the throat, by hot wet cloths, bags of bran, meal, or salt, or a hot poultice of some kind. Hot syringor a hot poultice of some kind. Hot syringing, if done with care, so that the water does not go with too great force, will also help. When much-hardened wax causes pain, use hot soap-suds, or hot water containing a few drops of a solution of bicarbonate of soda. Coughing may be stopped sometimes by slowly dissolving sugar on the tongue, by the property of the chew.

use of a little honey, lemon-juice, or the chewing of slippery elm. Gargling with hot or cold water, or applying hot fomentations to the chest or on the back between the shoulders, will also give relief in many cases. The use of a steam inhaler may prove effective,

when nothing else avails.

Warts may be removed by oiling the skin about the wart and then touching it with the end of a stick wet with nitric or acetic acid. Repeat once every three or four days.

Corns may be treated with acetic acid, after soaking the feet in hot water, if necessary more than once a day. The hardened skin may afterwards be scraped away with a knife or rubbed down with sand-paper or pumice-stone. In addition to this, if the corn is extremely hard, a cloth wet with a strong solu-tion of soda may be worn at night.

Felons can best be treated to a prolonged bath of water as hot as can be borne. Avoid using the hand as far as it is possible. In some cases very cold water gives more relief than hot. If these fail, the finger should be lanced to the bone, after which a poultice should be

applied.

Lotion for chapped hands and for removing freckles caused by wind and sun: Camp. tr. benzoin, 4 dr.; alcohol, ½ dr.; glycerine, 10z; water, 2 oz. A small quantity rubbed on the hands two or three times a day will prevent chapping, and will keep the skin soft and healthy.

Lotion for removing redness and pimples to be applied not oftener than twice a day): Zinc sulphate, 1 dr.; rose-water, 1 pint,

Lotion for cleansing the hands: Borax, 4 dr.; carbonate of soda, ½ dr.; carbonate of ammonia, 2 dr.; aquæ ammonia, 4 dr.; gly-

ammonia, 2 or., aque ammonia, 2 or., go-cerine, 1 oz.; water, 6 oz. A harmless white powder for the face: Uss starch and oxide of zinc, eight parts of the former to one of the latter. For red powder, take carbonate of magnesia, colored with one-fourth part of carmine-red.

# Bartholdi's Statue of Liberty

The great Statue of Liberty in New York harbor, presented by the people of France to the American people, weighs 450,000 pounds, or 225 tons. The bronze alone weighs 200,000 pounds. Forty persons can stand comfortably in the head, and the torch will hold twelve people. Total number of steps in the tweive people. Total number of steps in the winding stairway, leading from the base of the foundation to the top of the torch, 403; steps from the ground to the top of the pedestal, 195. Number of steps in the statue, from pedestal to head, 154. The ladder leading up through the extended right arm to the torch has 54 rounds. The electric light in the invide of the torch lump aggregates 50 000 and inside of the torch lamp aggregates 50,000, and at the base of the statue 30,000 candle power—80,000 in all. Entire cost of the work estimated at \$700,000. The dimensions of the

tue of Liberty.		
huge statue, with its pedestal and fou	ndati	on,
are as follow: F	EET.	18.
Height from base to torch	151	110
Foundation of pedestal to torch		6
Herl to top of head		- 8
Length of hand		- 2
Index finger	8	- (
Head from chin to cranium	17	2
Right arm, length	42	- 1
Right arm, greatest thickness	12	-
Thickness of waist	85	ш
Height of pedestal	89	к
Height of foundation	65	
Square sides at base, each	62	
Square sides at top, each	40	3
Grecian columns above base	72	3
Square sides at bottom	91	
Square sides at top	86	к
Educa or col.	20	

### Care of the Eyes and Ears.

The old rules prescribing abstinence from reading "after sundown or before sunrise," or by a candle or other artificial light, may be regarded as done away by the great improve-ment in our means of illumination. Each per-son must make his own rule for himself in this matter, according to observable effects upon his own eyes.

A moderate amount of reading when in a reclining position is not injurious. Invalids and many literary persons read a great deal when in bed, often without serious injury to their sight. This also modifies an old rule. The main thing in the case is to have a proper

A moderate amount of reading in cars in a good daylight, or on a steaming in taxis in good daylight, or on a steamboat or sailing vessel, is not injurious; on the contrary, is often commendable. Certain other venerable prescriptions may be corrected in the light of this, which, with others in this article, are approved by an experienced and learned physician.

Never attempt to look at the sun while shining, unless through a colored glass of some kind; even a very bright moon should not be

long gazed at.

The glare of the sun on water is very injurious to the sight.

A sudden change between bright light and darkness is always pernicious.
In locking at minute objects, relieve the eyes frequently by turning them to something in

the distance. Let the light, whether natural or artificial,

fall on the page from behind, a little to one

Every parent should peremptorily forbid all sewing by candle or gaslight, especially of dark material.

Our authority does not commend the method sometimes recommended, of opening eyes whose lids are matted together upon awakening, by applying saliva with the finger. There are twenty-six kinds of bacteria in the mouth, and on the inflamed conjunctiva there must be many of the bacteria of putrefaction. What, he asks, could be more uncleanly than using the finger to lave an inflamed eye with the saliva? Use a mild unguent at night, like petroleum or spermaceti ointment, or cocoa butter, on the eyelids, and in the morning use warm water to wash them. A very mild astringent may be used, as 1 grain sulphate of zinc to half an ounce of water. a few drops twice daily for a few days, if there are no very active symptoms, as shown by pain and fear of light.

Never bathe or open the eyes in very cold water. It always is the safest, best, and most agreeable to use warm water for that purpose

of over seventy degrees temperature.

Never pack with cotton the external tube of the ear when it is discharging pus, except in the following cases: If there is a discharge of pus and a cold wind is blowing or if the ear has recently been syringed with warm water. a large piece of absorbent cotton should be placed in the external ear on going out of doors, and the ear should also be covered by a woolen or silk handkerchief or comforter.

Never put anything into the ear for the relief of the toothache.

<u>. i. i. v</u>

Never drop anything into the ear unless it has been previously warmed.

Never attempt to apply a poultice to the inside of the canal of the ear. Never use anything but a syringe and warm

water for cleaning the ears from pus.

Never strike or box a child's ear; this has been known to rupture the drum-head and come incurable deafness. Never wet the hair, if you have any tendency to deafness; wear an oiled-silk cap when bath-

ing, and refrain from diving.

Never scratch the ears with anything but the finger if they itch. Do not use the head of a pin, hair-pins, pencil-tips, or anything of that nature. Use a wash-rag with the finger, or the wet corner of a napkin, to wash the ears and

remove itching. Never let the feet become cold and damp, or sit with the back toward the window when the air is cold, as these things tend to aggravate any existing hardness of hearing.

Never put milk, fat, or any oily substance into the ear for the relief of pain, unless for earache or to kill an insect, as they soon become rancid and tend to incite inflammation. Simple warm water will answer an ordinary

purpose better than anything else.

Never be alarmed if a living insect enters the ear. Pouring warm water in the canal will drown it, when it will generally come to the surface and can be easily removed by the fingers. Or, better, use warm sweet oil, which asphyxiates the insect quicker than water. A few puffs of tobacco-smoke blown into the ear will stupefy it.

Never meddle with the ear if a foreign body, such as a bead, button, or seed enters it; leave it absolutely alone, but have a physician attend to it. More damage has been done by injudicious attempts at the extraction of a foreign body than could ever come from its presence

in the ear.

THE wonders of the modern world are teleg-THE wonders or the modern world are telegraphy in its different forms, including the phonograph, telephone, microphone, and deep-sea cables; steam, including railroads, ocean steamers, and machinery of all kinds; printing, including li hography and engraving; gunpowder, including dynamite and nitro-glycerine; photography, from daguerreotypes to the new landscapes in natural colors; lenses, including telescopes, microscopes, and all including telescopes, microscopes, and all kinds of glass-s; and weather forecasts. They are all of service to mankind, and much more wonderful than the wonders of old time.

Witticisms.—A man sent his two boys to a wirtchas.—A man sent his two boys to be friend's until the peril of an impending earthquake should be passed. In a few days he received this message, "Please take your boys home and sent down the earthquake."

Even the laziest boy can catch a licking.

If you want a thing well done do it yourself; therefore, always laugh loud at your own jokes.

The only difference between perseverance and obstinacy is that one comes from a strong will and the other from a strong won't.

Conundrums. - What is the difference between the Colossus of Rhodes and King Henry VIII.? The Colossus was a wonder, and King Hank was a Tudor.

Why is a mosquito like charity? Because in

spring it begins to hum.

What is the longest word in the English language? Smiles, because there is a mile between the first and last letter.

AT what time of day was Adam born? A little before Eve.

THERE are 1,750 languages. One person dies every second. A storm moves 36 miles an hour. The average life is 31 years. Sound moves 1.18 feet per second. The first use of the locomotive in this country was in 1820. The first steam engine was brought from England in 1753. The first printing press in the United States was introduced in 1629.

### Some Points of Legal Information.

[Adapted to Michigan by A. H. Wilkinson, Esq., of the Detroit Bar. See also "Some Michigan Laws Epitomized."]

#### CONTRACTS.

A contract for the sale of real property must be in writing. A contract for the sale of goods, chattels, or things in action, having a price of \$50 or more, is void unless some memorandum or note of the transaction is made in writing and signed by the parties to it, or the buyer accepts and receives part of the goods or evi-dences of things in action, or at the time pays a part of the purchase money. A promise to answer for the debt or default of another is void, unless it is in writing or a note or mem-orandum of it be made and signed by the promisor. A lease for more than a year must promisor. A lease for more than a year must be in writing; but a lease for a year or less, or an agreement to make a lease within a year. need not be written.

Written evidence is preferred before oral in the courts, as more likely to be correct. Evidence to contradict it or vary a written contract cannot be introduced, but may explain

it when necessary.

An agreement without consideration is not

Each partner is responsible for all the debts of the partnership, unless it be special or lim-

#### NOTES.

The payee should be named in a promissory note, unless it is to be payable to bearer. note or check may be payable to one's own order, but he must then endorse his name upon it. "Value received" is usually written in the note, but need not be, as the law presumes it or it may be proved orally. Notes bear inter est only when it is mentioned, until they fall due. If no rate of interest is named, the rate is that which is legal in the State. The time of payment must be specified and absolute, not dependent upon any contingency. A note or bill may be written upon any sort of paper or other substance, with ink, pencil, typewriter, or any other materials.

Promissory notes imply three days' grace, or that much more time for payment after maturity. Demand of payment should be made at the place specified in the note, if any, or at the residence or place of business of the persons held for its payment, within business hours. If no place is named in the note, reasonable diligence must be used to find the place of residence or business. If the party has run away or removed from the State, and no longer maintains a known place of business therein, there is no need of demand to make the endorser liable. If partners are jointly liable, notice to one is enough. A note pay able on demand may be put in suit at once, but is barred by the statute of limitations in six years; and a demand note bearing inter-est is dishonored after a reasonable time beyond maturity, though not presented for payment. But any one who receives it from the payee after such time and without inquiry, even for value received, takes it under any defenses which the maker has against the payee.

Formal protest of a note or bill is necessary to make endorsers liable for its payment. Such protest is made by a notary or any other person with a witness, who takes the note or bill to the proper place for presentment, demands acceptance or payment as the case requires, and certifies default, if any. Notice is then served at once upon the endorser, and any other person that may be chargeable, directly or through the holder of the paper, who in turn notifies the parties. A letter containing notice of protest, properly prepaid and

placed in the mail, is sufficient, even though it be lost or miscarried. No cause of action is good against the endorser of a demand note payable at a particular place, until demand has been made as prescribed and notice of non-payment duly given. It makes no difference whether an endorsement is written on the face or back of a note or check. If an endorser wishes to avoid any liability for payment, he adds the words, "Without recourse," or some similar expression. Joint payees not partners must all join in endorsing. A note endorsed in blank—that is, with only the name of the endorser—is transferable by simple delivery, as if payable to bearer.

If a note or bill be transferred as security

for a debt, the debt remains if the note or bill be dishonored. If transferred as payment and the creditor accepts it as such, the debt

is paid.

The loss of a note does not release the maker, who is held for its payment if the amount and consideration, and the title of the former holder to it, are proved, and the maker is protected by security upon payment.

The maker of an accommodation note or bill—one which has no consideration, and is given merely to lend name or credit to the holder—is not bound to the original payee, but is held chargeable to all others who may hold it for consideration, if transferred before maturity.

A creditor taking the note of his debtor, ayable on a fixed day or in future, suspends his right of action on the note until it has

#### CHECKS AND DRAFTS.

A bank can pay a depositor's money only according to his directions and in the regular course of business, and cannot charge against him any payment made without his authority as to the person, time, and amount of the

payment.
The holder of a check or draft should present it for payment within a reasonable time. One who transfers a check to another has a right to insist that it be presented within right to insist that it be presented within reasonable time, and the general rule is that it shall be presented on that day or at furthest the next day. Bills and drafts pa-able in the State, or checks payable at sight, on a specified day, or in any number of days after date, are without grace.

Certifying a check does not bind the bank to a guarantee of its genuineness in all re-spects, nor against alterations made in the body of it; and the statement of a bank officer that a check is genuine does not hold his bank for its payment.

#### PAYMENTS.

A payment on a general account is applied to the oldest items of account, in the absence of directions from the debtor. Payment without direction on an account made up of several causes of action may be applied on any of them, at the time or afterwards, if the debtor do not meanwhile order otherwise. But if he designate a particular debt to which his payment shall apply, he must be obeyed. A cause of action is held to accrue upon open and mutual accounts from the date of the last item in the account on either side

Statutes of limitation bar the right of action at law after a certain time, on legal pre-sumption of payment or settlement. In general, judgments of a court of record, promissory notes, and contracts not under seal, must be sued upon within six years. If the

debtor is out of the State, the six years do not begin to run until he returns, and successive absences may be summed up and deducted from the time. Part payment, after the limitation has expired, revives the debt for another six years from the time of such pay-ment. [See "Statutes of Limitation," below.]

All persons in Michigan are legally deemed

infants while under twenty-one years of age, except that a woman may contract marriage at the age of eighteen. Also, a contract made by an infant for suitable necessaries for his own use is binding upon his individual property. But if they have been furnished to him by another, on account of his parent's neglect to supply them, the parent is chargeable. [For our law concerning married women, see "Some Michigan Laws Epitomized."]

#### The Several Statutes of Limitation.

Statutes of limitations presume settlement of open accounts after one year in Pennsylof open accounts after one year in Fennsylvania; two years in Arizona, California, Florida, Kentucky, Montana, Texas, and Utah; three in Alabama, Arkansas, District of Columbia, Florida, Illinois, Louisiana, Maryland, Nississippi, North Carolina, and Washington Territory; four in Georgia, Nebraska, New Mexico, and Wyoming; five in Indiana, Iowa, Kentucky, Missouri, and West Virginia; and six in the other States and Territories, including Michigan

Upon promissory notes legal presumption of payment arises three years after maturity in Arizona, District of Columbia, Maryland, North Carolina, and Wyoming; four in California, Texas, and Utah; five in Arkansas, Florida, Kansas, Louisiana, Nebraska,

The legal rate of interest is five per cent. in

Louisiana; six in Arkansas, Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Kemtucky, Maine, Maryland, Massa-chusetta, Mississippi, Missouri, Michigan, New

Hampshire, New Jersey, New Mexico, New York, Nerth Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia; seven in California, Da-

and West Virginia; seven in California, Dakota, Georgia, Kansas, Minnesota, Nebraska, South Carolina, and Wisconsin; eight in Alabama, Florida, Oregon, and Texas; ten in Arizona, Colorado, Idaho, Montana, Nevada, Utah, and Washington; and twelve in Wy-

Virginia, and Wyoming; seven in Georgia; ten in Illinois, Indiana, Iowa, Missouri, and West Virginia; fifteen in Kentucky and Ohio; and six elsewhere.

Judgments of a court of record are legally presumed to be satisfied after five years in Arizona, California, Kansas, Nebraska, Ohio, Arizona, California, Kansas, Nebraska, Onlo, Pennsylvania, Utah, and Wyoming; six years in Colorado, Idaho, Michigan, Montana, Nevaria, Vermont, and Washington; seven in Georgia, Illinois, and Missisylppi; ten in Arkansas, Indiana, Iowa. Louisiana, Minnesota, North and South Carolina, Oregon, Tennessee, Virginia, and West Virginia; twelve in the District of Columbia and Maryland; fifteen in Kantingky New Mexico, and Towas, and Kentucky, New Mexico, and Texas; and twenty in other States, except Connecticut, which does not limit the life of judgments.

#### Interest Laws.

days, separate right-hand figure, and divide by three.

Woman suffrage prevails on the same terms with men in Wyoming Territory. For several years it prevailed similarly in Washington Territory and Utah, but was set aside in the former last summer by decision of the Supreme Court, and in the latter by the Edmunds law, passed by the XLIX-h Congress. In Kansas women have full suffrage in municipalities law, passed by the XLIX-h Congress, In Kansas women have full suffrage in municipalities, and in Arkansas and Mississippi they vote on license to liquor sellers, in the form of petition to the granting power. They vote at school meetings and elections, with various restrictions, in Colorado, Dakota, Idaho, Indiana, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, Oregon, Vermont, Washington Territory, and Wisconsin. Woman-suffrage bills were defeated in the Legislatures of 1887 in Michigan and Massachusetts.

oming. The rate of interest allowed by contract is The rate of interest allowed by contract is six per cent in Delaware, Maryland, New Hampeleire, New Jersey, New York (any rate on call loans of \$5000 or more, on collateral security, Peansylvania, Tennessee, and Vermont; eight in Alabama, Georgia, Illinois, Indiana, Kentucky, Louisiana, North Carolina, Ohlo, and Virginia; ten in Arkansas, District of Columbia, Iowa, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Oregon, South Carolina, and Wisconsin; twelve in Arizona, Kansas, New Mexico, and Texas; eighteen in Idaho, and sny rate in other States and Terridaho. Idaho, and any rate in other States and Territories, except Connecticut and West Virginia, where only six per cent can be collected by law, but a higher rate is not accounted usury.

HANDY INTEREST RULES.—The answer in each case being in cents, separate the two right-hand figures of the answer to express in

dollars and cents.

Four per cent.—Multiply the principal by the number of days to run, separate right-hand figure from the product, and divide by nine.

Five per cent.—Multiply by number of days and divide by seventy two.

Six per cent. - Multiply by number of days,

Six per cent.—Multiply by number of days, separate right-hand figure and divide by six. Eight per cent.—Multiply by number of days and divide by forty-five.

This per cent.—Multiply by number of days, separate right-hand figure and divide by four. The per cent.—Multiply by number of days the per cent.—Multiply by number of days the per cent.—Multiply by number of and the per cent.—Multiply by number of

CONUNDRUMS. — What is the difference between a civilized diner and a person who subsists at the North Pol-? One has his bill of fare and the other has his fill of bear. What word is always pronounced wrong even by the best scholars? W-ro-n-g, of

What kind of sweetmeats were in the ark?

Preserved pairs. What is the difference between a postage

stamp and a boy hanging on behind a carriage? The first you have to lick to make it stay on, and the latter you have to lick to make him stay off.

WITTICISMS.—If there is one time more than another when a woman should be entirely alone, it is when a line full of clothes comes down in the mud.

A certain man unwilling to accuse his neighbor of lying, remarked that he used the truth with penurious frugality.

The young man who boasted that he could marry any girl he pleased, found that when he was ready to marry that he could not please any.

### Poultry, Birds, and Plants.

Kerosene emulsion for insects on plants: Melt a half-pound of common soap (that made of whale oil is best) in one gallon of water, and heat it. While it is boiling hot add water, and near it. while it is conting not and to it two gallons of k-rosene, and churn the mixture about ten minutes. When this is well done the emulsion will look like rich cream. It is to be diluted with twenty-seven gallons of water, making thirty gallons of the wash. It is sure death to most insects, and

will not harm the plants to which it is applied. Clear a bird-cage of insects by holding a lighted candle under every portion of the top; afterwards keep perfectly clean, and allow your canary frequent baths. These are far better than merely hanging a bag of sulphur somewhere on the inside of the cage. A bird will not sing if he is not well Hang the cage in front of a window, and in summer out of doors, but not in the hot sun or wind. Birds are not fond of dark corners. Keep the cage scrupulously clean; foul perches make sore feet, and insects abound where there are bad odors. A kird will almost always bathe if he has a quiet, warm, light place and cold water. He needs sand to aid in digesting his food. He needs sand to aid in digesting and Plenty of clean sand on the floor of his cage Plenty of clean sand on the floor of his cage bone will give him lime for bone making, and furnish him with something to do. Clean, fresh seed, with no hemp in it, should be his staple food, and clean water in a clean dish staple food, and clean water in a clean dish his drink. Something added every day, such as dry bread or cracker,—he likes brown bread best,—warm baked-potato, hand-boiled egg. fig or date, apple, raw or cooked green corn, bread and milk, water-cress, celery, lettuce, catbase, give variety, and birds like variety as well as people. Besides all else, don't forget to talk to him. He is a prisoner at best and a little attention never can come at best, and a little attention never can come

Experience in keeping poultry: "I have kept poultry for the last six years for domestic uses, and found the following mode of

feeding productive of very beneficial results. I feed a warm mash of corn-meal, seasoned with red pepper and chopped onions alternately, with occasionally a little sulphur added; a cabbage daily throughout the winter months; lukewarm water, and a small plat of ground to run over. Strict attention is paid that they are fed regularly and as nearly to the says time as youthly 2.7 the is paid that they are fed regularly and as nearly to the same time as possible. In the afternoon I give them buckwheat and other afternoon 1 give them buckwheel and other grains, varying the different kinds weekly. The dimensions of my poultry-house are 16 feet by 6 and 6 feet high, well ventilated, scrupulously clean perches, washed over come a week with a little kertsene oil; a little substantial of the present and have unforced. phur sprinkled in the nests, and plenty of road-dust gathered and barreled in the early autumn months for the hens to dust themselves in. Hence my poultry are never trou-bled with vermin or other diseases."

To keep cut flowers fresh: Don't put too many into the glass at once; change the water once or even twice a day, remove decayed leaves as soon as they appear, and cut the ends of the stems occasionally. A still better way is to put nitrate of soda in the water; about as much as can be easily taken up by the fingers, put into the glass each time the water is changed, will preserve cut flowers in all their beauty for above a fortnight. Common saltpetre in water will answer almost the same purpose, but it is not quite so efficacious.

same purpose, but it is not quite so emeacous. Never give up a choice but de caying rose-bush till you have tried watering it two or three times with soot tea. Take soot from chinney or stove in which wood is burned, and make tea of it. When all is used, pour the soot. boiling water a second time on the soot. The shrub will quickly send out thrifty shoots, the leaves become large and thick, and the blossoms will be larger and richer than ever before.

It is said that a few drops of carbolic acid that is, ten drops in one pint of water—will, if poured over the earth in flower pots, kill all living things in them except the plants.

#### Antidotes for Poisons.

In case of poisoning from an alkali, give 2 or 3 tablespoonfuls of vinegar in half a glass of water or the juice of 2 or 3 lemons. Follow this with 3 or 4 tablespoonfuls of olive oil and a large draught of milk. Do not give emetics or use the stomach-pump. Inhaling the vapor of hot vinegar from an inhaler or ordinary tea-pot is an antidote for inhaled ammonia

For acid poisons, give a teaspoonful of baking soda, soft soap, hard soap shaved and dissolved, magnesia, or chalk. Follow with the white of an egg and plenty of milk; no

emetic is required.

For metallic poisons, give white of an egg, clear or in cold water, and a mustard or alum emetic. After vomiting, the patient might drink plenty of milk, white of egg, or a thin

mixture of wheat flour and milk.

For narcotics, 2 or 3 tablespoonfuls of powdered charcoal. Excite vomiting by emetics, tepid water, or any other method, after which give more charcoal. Apply ammonia to the nostrils, give strong tea or coffee, make alter-nate hot and cold applications to the spine, use friction on the surface, and keep sleep away by walking around the room.

Phosphorus enters into many preparations for poisoning rats, cockroaches, and other vermin, and is also contained in phosphorus matches. It has no antidote, An emetic made of one or two teaspoonfuls of powdered mustard or alum in a goblet of warm water, will empty the stomach, after which large nantities of thin gruel should be given.

For nettle-wounds, stings of bees, wasps, etc., a solution of baking soda may be applied at once, but a better remedy, if at hand, is the following: Carbolic acid, one teaspoon-ful; glycerine, two tablespoonfuls; ammonia, one tablespoonful; water, one half-pint. For poisoning by ivy, dogwood, elder, and swamp sumach, take equal parts of lime-water and a strong decoction of oak bark. A handage should be wer with this solution and

bandage should be wet with this solution and applied, removing as often as it becomes dry. For immediate use apply diluted ammonia-water, weak lye, lime water, a strong solution of baking soda, or, if nothing else is at hand, common soft soap.

Potatoes that have grown partly out of the ground and are green on one side, and those that have had long sprouts taken from them, should never be eaten, as they contain poison. Potato-balls, and sometimes the stems and

leaves, have the same principle.

People who eat raw or rare beef are those

who have the tape-worms.

In case of poisoning by carbonic acid gas, remove the patient to the open air, dash cold water on the head and body, and stimulate the nostrils and lungs by hartshorn, at the same time rubbing the chest briskly.

For opium or laudanum poisoning, give a strong emetic of mustard and water, then strong coffee and acid drinks, dash cold water on the head.

For alcohol poisoning, cleanse the stomach with an emetic, then dash cold water on the head, and give spirits of hartshorn (ammor

#### Games for the Household.

TWENTY QUESTIONS.—One of the company | thinks of an object which the others try to find out by questions. Every one in turn may ask out by questions. Every one in turn may ask one, or any person may propose a question as it occurs to him, provided there are no long silences and no repeating questions. The questions should be clear and to the point; the answers prompt and strictly honest. If the company so decide, the answers may be only yes or no, and the queries must be so put that they can be answered in this manner. Good topics for beginners to seek are the moth of the silkworm, a spider, a peanut, a pumpkin ple, one of the stones with which David hit Goliah, the bloody key in the story of Blue-

beard, and many others.

VERBARIUM. — Provide all with paper, pencil. and a plane surface on which to write. out a word, in order to see how many other words can be formed from its letters in a given brief time, say five minutes. The one who writes the greatest number wins the game. It is best to write the words in columns; allow no proper names unless they are commonly known, no foreign words, and after a time no plurals when the singulars have been written, and no words of less than three letters. Choose and no words of these than three feters. Choose the words with care, selecting those with several different vowels, if possible. The following are good ones in beginning to play this game: Carpets, vermifure, facetiously, housemaid, Zenobia, hypocrite, bachelor. The winner at the end should read his list of words, spelling each one as he reads.

Comparison.—One of the company thinks of COMPARISON.—One of the company thinks or three words having the sound of degrees of comparison, but in reality with no connection of the kind. He describes first his "positive," then his "comparative" and "superlative" in turn, the company trying to discern his words. He who discovers them first thinks of the next comparison. To illustrate,—the positive might be "go," the comparative "gore," the superlative "ghost." Here are a few added ones. Be or hes heer or bier, beast: added ones: Be or bee, beer or bier, beast; snow, snore—no superlative; I, aye or eye, ire or eyre, iced; but or butt, butter, bust; teach, teacher, teachest.

Advice.—Paper and pencil having been pro vided, each player writes a piece of advice upon a slip and folds it. When all the papers are collected and shuffled each draws one, which he holds until called upon to read. Be-fore unfolding and reading, everyone must declare whether he thinks the advice worthy to be followed, or unsuitable, or unnecessary He then reads the advice aloud.

PREDICAMENTS AND REMEDIES .- All being sated in a circle, each person whispers to his right-hand neighbor a predicament and to his left a remedy. Then each in turn repeat about the combination: Example: One having been requested to give his combination says, "I am asked what I would do if caught on the street care with a right way and a second a se cars without either money or tickets, and am advised to knock down the first person who approaches me.

approaches me."

EARTH, AIR, AND WATER.—The company being closely seated in a circle, one of the number is selected to lead. He stands in the center, and calling out either "earth," "air," or "water." points to one of the players and immediately begins to count aloud. When he has reached ten, if the one designated has not spoken the name of some animal that lives in the element designated he must take the in the element designated, he must take the cuital place or be punished by having to fland, or pay a penny or other forfeit.

The Minister's Cat.—Each person in turn turns the state auccessively with the different letters and the behavior of the country of the

alphabet. One says, for example, "The Black kids.

minister's cat is amusing; " others follow, asserting that it is awful, apoplectic, attenuated, artistic, etc. Again the minister's cat is beligerent, beautiful, bouncing, beloved, bald, bawling, brief, etc.

CRUMBO.—Let everyone be given a piece of paper and pencil, and also two smaller slips of paper and pencil, and also two smaller slips of paper. On one of the latter write a question, on the other a single word. These being distributed separately and drawn, each in turn, reads the question he has, and on the blank paper first given him writes a rhymed answer to it, in which the single word given

must be introduced.

Anagrams. -- These are always entertaining. ANGRAMS.—These are always entertaining. By re-arranging the letters in a name or a single word, surprising and often amusing results may be reached. Try these: Charles Dickens, Thomas Carlyle, John Ruskin, ten spiders, tiny tree. The following are rather unusual and apt: Astronomers, moon-tarers; telegraphs, great helps; Presbyterians, best in prayer; Florence Nightingale,—flit on, cheering area.

ing angel. ACTED VERBS .- Half the company leave the room, while the rest fix on a verb which the absent ones are to guess and indicate by their actions. When their decision is made they call in the leader of the outside party and tell him, for instance, that the verb chosen him, for instance, that the verb chosen rhymes with pie. He retires and with his followers consider what it may be. In general, it is better to take simple verbs rhyming with the word given, in alphabetical order. "Buy" would perhaps come first in the given case. The party then enter and begin lively purchasing from one another If they are right, the others clap their hands; if wrong, they are hissed. Nothing must be said on either side; the whole is in pantomime. If hissed, the performers retire and after consideration try again with "ery," "die," or "fly," and so on till applause rewards their efforts to find the right one. The others then go out, if it is desired to explain the graph. sired to continue the game.

Buried Cities, etc. - One of the party recites a brief sentence slowly and carefully, in which the name of a city or person, or any thing else that may be agreed upon, is con-cealed, while the rest try to discover it, perhaps writing the sentence down to make the concealed word more apparent. For example: My pa rises [Paris] at six every morning. By the brook lynx-eyed [Brooklyn] watchers stood. He was a tramping jour Nally [Jour-

nal] employed.

Dor.-Each of the party has a paper and pencil, except one, who reads aloud distinctly and rather slowly, while the rest try to keep pace with him by making a dot for each word. When he has read a hundred words or less, each player counts his dots, and comparisons are made to see who has come nearest to the number.

What is better than a promising young

what is better than a promising young man? A paying one.
"A prudent man," says a witty Frenchman,
"is like a pin; his head keeps him from going too far,"
Who is the base of the says a witty Frenchman,

Who is the straightest man mentioned in the Bible? Joseph, because Pharaoh made a ruler of him.

The one thing needful for the perfect enjovment of love is confidence. Same with hash and sausages.

What are the two principal Ministers of the terior? The cook and the doctor. Interior? Why is the letter k like a pig's tail? Because

it is the end of pork.

What animals are often seen at funerals?

Concerning Color and Colors.

It is an interesting fact that the effects of color upon the eye resemble those of sound upon the ear in this, that each is the result of vibrations. The lowest number of vibrations of the air that human hearing can perceive as continuous sound is stated pro-highest or acutest sounds perceivable are pro-highest or acutest sounds per second. Beas continuous sound is sixteen per second; the duced by 48,000 vibrations per second. tween these numbers and those of the vibrations requisite to produce the sensation of light, the interval is inconceivably great, the production of red light, the lowest in the series, requiring 458 billions, while violet, the highest, requires 727 billions of vibrations to the second.

The seven colors of the prismatic spectrum are conveniently remembered in their order by a word composed of their initial letters, VIBGYOR,—violet, indigo, blue, green, yel-low, orange, red. Of these the red is the heating, yellow the luminous, violet the chemical ray of light. The luminous colors, however, in the sense of warm, are considered to be yellow, orange, red, light green, and the lighter tones of sombre or cold colors, which are blue, violet, deep green, and the broken tones of the luminous colors. (Broken tones are those into which all three of the primary colors enter.) Orange is the only one of the secondary colors which is never sombre, as it is itself the complement of two luminous colors, yellow and red.

The simple, primitive, or primary colors are red, blue, and yellow. In various combinations these three produce every hue or tint known in nature and art—of which the workers in Gobelin tapestry are said to distinguish 1000 Combined are tinguish 10,000. Combined in pairs, they produce the secondary colors, blue and red giving violet; blue and yellow, green; and red

and yellow, orange. Unequal mixtures for secondary colors produce "tones." The tertiaries, or compounds of the three primaries in varying proportions, are all grays or browns. By adding a primary or secondary color to normal gray, colored grays are produced. Thus, russet is red-gray, citrine yellow-gray, and olive blue-gray.

Complementary colors are those which, added to any other given color or colors, make up the three primary colors and consti-tute white light. If the given color is primary, as blue, its complement is composed of the other primaries—in this case orange, com-bined of red and yellow. Similarly red is the complement of green (blue and yellow) and yellow of violet (blue and red). Conversely, if the given color is secondary, its complementary color is the remaining primary. Thus, the complement of orange is blue, that of green is red, and that of violet is yellow.

Among the most pleasing harmonies of color, in pairs, are blue and orange or gold, blue and scarlet, blue and wh te, blue and black, blue and horse-chestnut brown; purple, black, or horse-chestnut brown with orange or gold; brown and gold, green and gold, cream and gold. Perhaps this will account for the popularity of blue and gold or green and gold bindings, and the like combinations.

Contrasts of color are simple or compound. Each primary color is in simple contrast to the other two primaries; as blue, against red or yellow. But the most powerful contrast that bue can have is made by mixing red and yellow, and producing orange.

Local color is the real fundamental color of an object, apart from accidental variations of light and reflection.

#### Terms in Fine Art.

ÆSTHETICS, the science of beauty, supplying the philosophical basis for the fine arts.

APPLIQUE, applied ornament, as of metal or porcelain upon wood. In embroidery, a pattern of one color or stuff laid upon another. AQUATINT, a kind of engraving by the aid

of mastic,

ATTRIBUTES, conventional symbols of the character, agency, or history of subjects of

art representation.

Bas-RELIEF, figures sculptured on a plane surface, from which they stand out less than half their proportional depth; mezzo, or demi-relief, projects just one half; alto, or high-relief, more than one half, from the surface upon which they are carved.

BRIC-A-BRAC, a collection of articles of virtu, as rare old furniture, china, and other

CABINET-PICTURES, small and highly finished, suitable to adorn small rooms. A "kit-kat pleture" designates a portrait or canvas twenty-eight or twenty-nine by thirty-six inches in size.

Cameo, a precious stone cut in relief. When the stone is incised or cut into, it is an "in-taglio." Stones of differently colored layers are usually selected for cameos, the figure thus being in one color, the ground in another. Carvatides, upright female figures placed

as columns, sustaining light weights. CATHERINE WHEEL OF ROSE WINDOW, a large

circular window, with radiating divisions. CHIAROSCURO, in painting and engraving, the distribution of light and shade with regard to general effect and the satisfaction of the eye.

Curios, short technical name for curiosities. Dapo, the panel, usually with moulding, unning around the lower part of a wall.

Distance. The point of distance (or of sight) in a picture is where the visual rays falling upon it meet when projected. Mid-dle distance is the central part of a picture, between the extreme distance and the foreground.

DISTEMPER, the use of water-colors on plaster or other dry surfaces - in this country usually called "fresco," which is strictly ap-plied only to painting upon fresh, undried plaster or stucco. Fresco secco is painting on a surface once dried, but again moistened.

DRY POINT, in etching, use of the needle directly upon the plate, without covering it or biting with acid.

Embossing, raised or ornamental work, as upon book-covers.

Excaustic, the use of colored wax on walls, after the manner of mosaic or enamels. Encaustic tiles are usually for ornamented

Engraving on wood is xyglography; copper, chalcography; on stone, lithography; on copper, steel, or glass, by the dry point or by covering the surface with wax or varnish, cutting it with a sharp needle through the covering, and then deepening "biting") the

marks by a mordant or acid, it is etching.
FACADE, the exterior face or front of a build-

ing, sometimes called frontispiece. FAIENCE, FAYENCE, OF MAJOLICA, simply fine pottery.

FIGURE-PAINTING, a term confined to representations of the human figure.

Foreshortening, representing objects on a plane surface as they appear in perspective.
GARGOYLE, the projecting end of a gutter,
often grotesquely carved.

GENRE PICTURES, representing everyday scenes of life and manners

GLORY, NIMBUS, OF AUREOLE, in pictures,

usually about the head, emblem of sainthood or Godbood.

HEAD-PIECE, ornament above the beginning of a new chapter in a book. Tail-piece, that at the end.

INLAYING, inserting ornaments in woodwork

for decorative furniture.

Light, accidental, an effect of light inde-pendent of the principal light of a picture. Reflected light is that thrown by an illumi-

nated surface into opposed shadows:

Macquerry, inlaid work of variously colored ornamental woods, sometimes stones and

MEDALHON, a medal larger than common coins. In architecture, a circular or ovar table on the face of a building; in sculpture, any circular tablet with engraved figures.

Monochrone, in one color, as red upon a black, or white upon a red, ground. Monolite, an obelisk or other work cut from a single block of stone.

Mosard, work imitating painting by joining small bits of hard material, as stone or glass.

OBVERSE, of a coin, medal, or seal, bears the principal symbol. The other side is the

Onders, in architecture, the Doric, Ionia, Corinthian, Tuscan, Composite, and many

later ones.

PASTEL, work in colored crayons.

PLAQUE, a flat plate of metal or painted china.
PLASTIC ART, sculpture. The graphic arts are painting, engraving, and the like.
SILBOURTTE, a profile picture, usually a por-

trait.

### Importance of Electricity and Petroleum.

If electricity should drop out of existence, the world would suffer the loss, in mechanical,

the world would surfer the loss, in mechanical, healing, and other appliances alone, of—

1. The telegraph, telephone and electrophone, the telautograph (writing one's own penmanship at any distance), and the telpher. The latter is a sort of suspended or aerial electric railway used for carrying small loads without personal accompaniment or attendance. The first one was put in operation in England, Oct. 17, 1863.

2. The electric rallway, steamboat, and balloon. Several kinds of the last named have

been devised, principally for military and naval uses. A small electric railway was exhibited by Thomas Davenport, a blacksmith of Bran-

oy nomas Davenport, a blacksmith of Brandon, Vt, so long ago as 1835.

3. The electric light, many kinds.

4. Electrotyping and electroplating, with their manifold applications in fine and industrial arts, even to the reproduction of statuary of heroic size. Anatomical specimens are thus preserved, and it has practically been proposed to electroplate the dead, and convert the human body into a statue. the human body into a statue.

5. The reduction of metals from solutions to

their ores, and the electrolyte refining of lead and copper, so as to obtain them chemically

6. Electric motors for nearly all mechanical

7. Electric gas-lighters, fuses, hammers, elevators, ploughs, water-boilers, whaling apparatus, etc., etc.

8. Electric door-bells, alarms, indicators, annunciators, and regulators in great variety.

9. Electric clocks, and the use of electricity

in regulating or announcing time, and in facil-

itating astronomical observations.

10. Submarine and other blasting, movement of torpedo-boats, and explosion of torpedoes, by electricity.

by electricity.

11. Executions for crime, through instantaneous and painless death by electric shock.

A bill for this has already been passed by the
New York legislature, taking effect Jan. 1, 1883.

12. Numberless applications, many of them

of the most important character, in therapeu-

tics, surgery, and dentistry.
13. Giving new wine old flavors.

Absence of petroleum would entail loss of-Kerosene and other cheap illuminating fluids, including—

2. Naphtha, also used for making oil-cloth and in cleaning clothes, gloves, etc.

3. Benzine, chiefly used in the manufacture

of paints and varnishes. 4. Gasolene, for making a kind of illuminating gas and for mixing with ordinary coal-gas.
5. A valuable lubricating oil.

6. A cheap fuel for furnaces and locomotive or stationary steam-engines.
7. Paraffine, a solid substance used in mak-

ing candles, matches, and waterproof clothes, also as chewing gum.

A salve or healer for wounds, etc.

Most of these are obtained from other substances in nature, but in general most easily and economically from petroleum.

# Ancient and Modern Artillery.

In old English the term artillery means any apparatus for projecting missiles, and was apapparatus for projecting missies, and was applied even, to bows and arrows, as in the King James Bible (1 Sam. xx. 40), where it is said, "Jonathan gave his artillery unto his lad." Forthis word "weapons" has been substituted in the Revised Version. The prototype of later artillery was the Roman balista, used principally for throwing huge stones, and the catamitic which chiefly projected large arrows. cataput, which chiefly projected large arrows, javelins, or bolts. The successors of these machines in the battles and sleges of the Middle Ages were variously called the trebucket or tripget, the mangonel or mangona, the plerrier or petrary, the briccola, etc., some of them throwing a projectile of 300 pounds' weight. In 1345 the Earl of Derby is said by means of a mangonel to have thrown back into a town the messenger sent to him to de-mand terms of surrender. By this time, howna made. They are supposed to have come played the Saracens invading Spain, horses and 12 works. ever, gunpowder had been invented and can-

stone cannon-balls were commonly used with them, of which specimens can still be seen outside the walls of Constantinople. Cannon of 200 tons weight have recently been made, for great armored vessels and for coast defense. Among the most famous makers or inrense. Among the most ramous makers or inventors of great guns are Parrott, Rodman, and Dahlgren, of America; Armstrong and Whitworth, England; and Krupp, of Essen, Prussia. The artillery organization of the United States army embraces light artillery, comprisionally the state of the control of the contro

ing field batteries of different kinds, and heavy artillery, or siege batteries and garrison ar-tillery. The material of a mounted battery of tillery. The material of a mounted battery of field artillery in active service includes six guns and caissons, one battery wagon, one traveling forge, and 112 horses, with 400 rounds of ammunition per gun; of a siege battery, four guns, one battery-wagon, one traveling forge, 60 horses, and 250 rounds per gun. During the War of the Rebellion the Union army employed about 1500 field-guns with 4000 ployed about 15,000 field-guns, with 40,000 horses and 48,000 men, besides 1200 cannor and 12,000 men in intrenched lines or field

### Railroad and Steamer Signals.

Travelers of inquiring mind would often like to know the meaning of the signals they see or hear, by which the movements of train or vessel are regulated. The following are regulations of the Michigan Central Railroad, and probably form a good representative code:

HAND AND LAMP SIGNALS.

To go ahead: An up-and-down motion. To stop: A motion crosswise with the track

To back up: A motion in a circle.

Train parted: A motion in a vertical circle at arm's length across the track, given continuously until answered by the engineer.

BELL-CORD SIGNALS.

To start when train is standing: One stroke of cab bell.

To stop when train is running: Two strokes of cab bell.

To call in flagman when train is standing: Two strokes of cab bell.

To stop at next station when train is running: Three strokes of cab bell.

To back up when train is standing: Three strokes of cab bell.

To reduce speed when train is running: Four stokes of cab bell.

WHISTLE SIGNALS.

Signal upon approaching stations, railroad crossings, and junctions, must be sounded half a mile from every regular and signal station except Chicago, always shutting off steam at n.ail stations to better facilitate the exchange of mails.

Apply brakes; stop—one short whistle.

Off brakes; start-two longer whistles. Answer to any signal, except train partedtwo short whistles.

Train parted-three longer whistles. Back up-three slow, short whistles.

Calling attention to signals carried-three rapid, short whistles.

Call in flagman—four longer whistles. Engineer's call for signals from switchmen,

watchmen, and trainmen-four short whistles. Road crossing-two longer and two short whistles

Send flagman out-six short whistles,

Alarm for stock on the track-Succession of short whistles.

TORPEDO SIGNALS.

One, Danger, stop. Two, Caution, run carefully.

STATIONARY AND FIXED SIGNALS.
White is a signal of safety; a stationary

white flag or white light signifies all is clear. Green is a telegraph signal; a green signal, displayed at a telegraph station, signifies that train orders are awaiting an expected train, and no conductor or engineer of any train or engine must leave that station without receiving a copy of the order for which the signal was

displayed.

displayed.

Red is a signal of danger, and signifies all is not clear. A red flag by day or red lantern by night, waved upon the track, signifies that trains must come to a full stop. When placed between rails it signifies that the track is impassable, and all trains must stop and ascertain cause before proceeding. In such cases red signal will be placed a distance of \$\frac{2}{2}\$ telegraph poles from the impass. tance of 25 telegraph poles from the impass-able point, and two torpedoes must be placed on the rail 10 telegraph poles beyond the signal at a distance of 59 feet from each other. On double as well as single track, red flag and torpedoes must be placed as above in both direc-tions from the impassable point. The waving of a hat or any like action must be regarded as a signal of danger, and not be passed unnoticed.

Blue and white combined is a signal of cau-

tion, and when placed upon side of track signifies track is out of order and must be run over slowly

A red flag by day or a red light by night, carried upon the front of an engine, indicates that another train or engine is following, which has precisely the same rights as the engine bearing the signal, and no more.

EFGINE-SIGNALS ON STEAMERS.

The following is the code of engine-signals prescribed by law for the Eighth and Ninth U.S. Supervising Inspection Districts, which include the great lakes and their tributaries, with the many St. Lakes and their tributaries, with the river St. Lawrence: One whistle or bell. ......Go ahead or stop. Two whistles or bells......Back. 

back strong.

PILOT-RULES FOR LAKE AND SEABOARD. The following are extracts from the rules and regulations prescribed by the U. S. Board

of Supervising Inspectors:

of Supervising inspectors:
When steamers are approaching each other
"head and head," or nearly so, it shall be the
duty of each steamer to pass to the right, or
port side of the other; and the pilot of either
steamer may be first in determining to purstandard and thereupon shall give as a sue this course, and thereupon shall give, as a signal of his intention, one short and distinct blast of his steam-whistle, which the pilot of the other steamer shall answer promptly by a similar blast of his steam-whistle, and there-upon such steamers shall pass to the right, or port side of each other. But if the course of such steamers is so far on the starboard of each other as not to be considered by pilots as meeting "head and head," or nearly so, the pilot so first deciding shall immediately give two short and distinct blasts of his steam-whistle, which the pilot of the other steamer shall answer promptly by two similar blasts of his steam-whistle, and they shall pass to the left, or on the starboard side, of each other.

When steamers are approaching each other in an oblique direction they shall pass to the right of each other, as if meeting "head and head," or nearly so, and the signals by whistle shall be given and answered promptly as in

that case specified.

If, when steamers are approaching each If, when steamers are approaching each other, the pilot of either vessel fails to understand the course or intention of the other, whether from signals being given or answered erroneously, or from other causes, the pilot so in doubt shall immediately signify the same by giving several short and rapid blasts of the steam-whistle; and if the vessels shall have approached within half a mile of each other, both shall be immediately slowed to a speed hardly sufficient for steamers way until the barely sufficient for steerage-way until the proper signals are given, answered, and under-stood, or until the vessels shall have passed each other.

When steamers are running in a fog or thick weather, it shall be the duty of the pilot to cause a long blast of the steam-whistle to be sounded at intervals not exceeding one minute. Steamers, when drifting or at anchor, in the fair way of other vessels in a fog or thick weather, shall ring their bells at intervals of

not more than two minutes

Whenever a steamer is nearing a short bend or curve in the channel, where, from the height of the banks or other cause, a steamer approaching from the opposite direction can not be seen for a distance of half a mile, the pilot of such steamer, when he shall have ar

rived within half a mile of such curve or bend, shall give a signal by one long blast of the steam-whistle, which signal shall be answered by a similar blast, given by the pilot of any approaching steamer that may be within hearing. Should such signal be so answered by a steamer upon the farther side of such bend, then the usual signals for meeting and passing shall immediately be given and answered, but if the first alarm-signal of such pilot be not answered, he is to consider the channel clear and govern himself accordingly. The signals by the blowing of the steam-whistle, shall be given and answered by pilots, in compliance with these rules, not only when meeting "head and head," or nearly so, but at all times when passing or meeting at a disrived within half a mile of such curve or bend,

at all times when passing or meeting at a dis-tance within half a mile of each other, and whether passing to the starboard or port.

When steamers are running in the same di-

rection, and the pilot of the steamer which is astern shall desire to pass on the right or starboard hand of the steamer ahead, he shall give one short blast of the steam-whistle as a signal of such desire and intention, and shall put his helm to port; and the pilot of the steamer ahead shall answer by the same signal, or, if he prefer to keep on his course, he shall give two short and distinct blasts of the steamer and the shall give two short and distinct blasts of the steamer and the s whistle, and the boat wishing to pass must govern herself accordingly, but the boat ahead shall in no case attempt to cross her bow or crowd upon her course

In construing and obeying these rules, due-regard must be had to all dangers of naviga-tion, and to any special circumstances which may exist in any particular case rendering a departure from them necessary in order to-

avoid immediate danger.

### Interesting Statistics of American Railways.

Recent articles in Scribner's Magazine furnish the following important and interesting notes:

A palace sleeping-car costs about \$15,000. A steel rail, with average wear, will last

about 18 years. The average cost of constructing a mile of

railway is about \$30,000.

Only about one person in ten millions who travel on railways is killed in railway acci-

The longest American railway tunnel is the Hoosac tunnel on the Fitchburg railway, 4%

miles long
The highest railroad in the United States is the Denver and Rio Grande, Marshall Pass,

10.852 feet. The Canadian Pacific Railway extends farthest east and west, running from Quebec

The Manhattan Elevated Railroad, New York city, carries the largest number of passengers, 525,000 a day, or 191,625,000 yearly.

There are in the United States 150,000 miles,

about one-half the railway mileage of the world. These railroads cost \$9,000,000,000 and

world. These railroads cost \$9,000,000,000 and employ more than 1,000,000 people.

The fastest time made between Jersey City and San Francisco was by a special train, in June, 1886, being 8 days, 7 hours, 39 minutes and 16 seconds in making the journey.

Peter Cooper built the first locomotive in the United States. A high-class, eight-wheel passenger locomotive costs about \$8500. The average daily earnings of an American locoaverage daily earnings of an American loco-motive are about \$100.

The longest railroad bridge span in the

United States is the cantilever span in Pough-keepsie bridge, 548 feet. The highest railroad. bridge in the United States is the Kinzna Viaduct, on the Erie road, 305 feet high.

The longest mileage operated by a single system is about 8000 miles, by the Atchison, Topeka and Sante Fe system. [The compilerwould add that the longest narrow-gauge system in the world is the Denver & Rio Grande, operating about 1500 miles exclusively in Colorado and New Mexico.]

### The Flower Clock.

The flowers of certain plants are so sensitive to the effects of light and heat that they open and close at exactly the same time from day to day, marking the sun's altitude and inclina-tion. This fact was made by Linnæus, the great botanist, the basis of many experiments and observations, resulting in the arrangement called his "floral clock." It consisted of three divisions, containing flowers that close earlier or later, according to the state of the atmosphere. This was the "meteorological division," and indicated the state of the weather. A "tropical division" as it was called, contained flowers that marked sunrise and sunset, and a "horological division" consisted of flowers that open and close at fixed and invariable It is a curious fact that there are twenty-four varieties of plants whose blossoms open successively at the different hours of day and night. Looking over his list we find the day-lily opens at 5 o'clock A. M., and the evening primrose at 5 o'clock P. M. Midnight belongs to the "cactus grandiflorus," or nightblooming cereus, whose magnificent flower expands and diffuses a subtle perfume soon after sunset, gradually unfolds, and then closes be sunset, gradually unfolds, and then closes be-fore day-dawn, when its strange mission is ended. The African marigold opens at 7 o'clock in the evening and closes at 4, if the weather be fair. If it does not open, rain is certain for the next day. It is said the flowers of the water-lily close and sink into the water precisely at sunset, but rise again to the sur-

face and expand at sunrise. Pliny described the lotus of the Euphrates which followed the same order; and the reverence which was paid by the Egyptians to the lotus is supposed by some to be from this association with the sacred sun. Flowers and fruit of the lotus are engraved on Eastern tombs and monuments, and adorn the heads of their sculptured deities. Besides the "floral clock," there is a floral calendar, in which each month is marked by its own loyal flower.

A NEW way of preserving autumn leaves is given as follows: Iron them fresh with a warm (not hot) iron, on which some sper-maceti has been lightly rubbed. This melted preserves perfectly their lovely tints, and gives a waxy gloss which no other one secures. The process is very rapid and agreeable, and no lady who has ever tried the tedious and uncertain experiment of pressing will ever again resort to it after once trying-this new and better way.

It is reported that a ton of ropes made from the hair of Japanese women is used in building the \$300,000 Buddhist temple at Kioto.

It is said that in the Turkish army there are no Mohammedan surgeons; all are Christians.

### Facts Concerning Mankind.

Dispersed over the entire globe, on land and sea, the human family is estimated now to number about 1,450,000,000 members. Yet every one of them could find standing-room in a field 100 miles square; and in one 200 miles square—that is, four times as large—the total of human beings could be comfortably seated,

with a little margin for movement In Asia, where man was first planted, there are about 800,000,000 people, averaging 120 to the square mile; in Europe 320,000,000, or 100 to the square mile; in Africa 210,000,000; relatively thinly scattered and recent; in the islands, large and small, probably 10,000,000. The extremes of the white and black races are as five to the remaining 700,000 being. as five to three, the remaining 700,000,000 being intermediate brown and tawny. Of the entire human race 500,000,000 are fully clothed—that is, wear garments of some kind, and live in houses partly furnished with the appointments of civilization; 700,000,000 are semi-clothed, living in huts and caves with little or no furnishing; 250,000,000 are practically naked, having nothing that can be called a home, and are barbarous and savage. The range is from the topmost round—the Anglo-Saxon civilization, the highest known—down to naked savagery. The portion of the race lying below the line of civilized conditions is at the very least three-fifths of the whole, or 900,000,000

In England the population doubles in 50 years; in the United States, Canada, and Australia, in 25 years; in Germany, in 105 years; in France and the French-speaking countries, 140 years.

The following is a careful calculation of the

average probability that a person of given age may die within a year: At 10 years, 1 in 184; 15, 1 in 181; 20, 1 in 129; 25, 1 in 124; 30, 1 in 119; 35, 1 in 112; 40, 1 in 1129; 25, 1 in 124; 30, 1 in 113; 36, 1 in 112; 40, 1 in 1129; 25, 1 in 124; 30, 1 in 113; 36, 1 in 10; 50, 1 in 17; A calculation, based upon a careful collection of facts, has also been made of the average likelihood of a woman's marrying at the several marriageable ages of her life: Between 15 and 20 years, 144 per cent, or about 1 chance in 7; between 20 and 25, 52 per cent; 25 and 30, 18; 30 and 35, 154; 25 and 40, 384; 40 and 45, 246; 46 and 50, 36 of 1 per cent; 50 and 56, 14; over 60, one-tenth, or 1 in 100.

The ten sevens of human life are these: Seven years in childhood's sport and play, 78 seven years to find and place a wife, 218 Seven years to pleasure's follies given, 35 Seven years for fame, a wild-goose chase, 8 seven years for fame, a wild-goose chase, 8 seven years for fame, a wild-goose chase, 8 seven years for fame, a wild-goose chase, 56 Seven years for hearting for your heir, 8 seven years in weakness spent, and care, 70 Then die and go vou should know where.

Seven years for hoarding for your neir, seven years in weakness spent, and care, 70 Then die and go you should know where. Although there are many thousands of Chinamen on the Pacific slope, each has made arrangements, in case he should die here, to be carried home to his own "Flowery Land" and there buried. The bodies of the rich are ambelmed or preserved in spirits when conand there ouried. The bodies of the rich are embalmed or preserved in spirits when car-ried, but the body of the poor man is put under ground until the fiesh is decayed, when it is taken up, the bones scraped clean and dry and tied together in a small bundle, which is prop-erly labeled and packed away with others to be shipped to China.

#### Public Debts of Foreign Nations.

The public debt of the United States is be-ginning to look small beside those of some of the strongest and most renowned nations of the strongest and most renowned nations of the Old World. Our own is little more than one billion, and the interest-bearing debt is less than a billion; while the public debt of Great Britain is about 3¾ billions of Gollars, that of France more than 4¼ billions, of Gollars, that of France more than 4¼ billions, of Russia 2¼ billions, and of Austro-Hungary over 2¼ billions, while even Italy has managed to accumulate a debt of nearly 3¾ billions. Exppt is terribly burdened with a debt amounting a few months ago to \$518,377,200, and little Belgium had then a debt of \$387,371,000, Denmark \$64,786,910, Canada \$273,164,341, Brazil \$431,884,400, the Argentine Republic \$184,672,500, Chili \$87,644,520. Bolivia \$21,923,000, the United States of Colombia \$19,911,350, and Ecuador \$18,163,750.

Ecuador \$18,163,750.

Russia is the worst situated of any of the foreign countries, in the matter of public debt. A late writer says the condition of Russian national finances could hardly be worse. The Government has used every con-

ceivable expedient to wring money out of its subjects, from customs, duties, and internal revenue taxes, to a per capita taxation and a five per cent income tax, yet each year an enormous revenue deficit confronts it. The public debt has reached a figure amounting to two thousand five hundred millions of dollars, and the deficiency for the fiscal year, just closed, will not be less than twenty million dollars. The revenue of the Russian Empire is at the same time larger than that of the United States; but \$105,00,000 expenditure for a military establishment and \$140,000,000 for interest on the public debt easily account for the embarrassment that nearly approaches for the embarrassment that nearly approaches bankruptcy. The paper currency of the Gov-ernment has so depreciated that silver commands a premium of 67 per cent; the Government lands, railroads, and mines are loaded down with mortgages which are held by fordown with motogogo which are lost by seigners, and the great syndicates of European capitalists are losh to advance more money to this over-burdened empire.

# The Improved Phonograph.

The new graphophone, or improved phonograph, is mounted on a skeleton iron table and worked by treadles like a sewing-machine. A steel bar runs parallel with and above a wax cylinder, which receives the sound-impressions. A sensitive metal disk armed with a vibrating point is hung upon the steel bar so that the point rests against the wax cylinder. The treadles turn the cylinder rapidly and move the disk slowly along the bar at the same time, while the speaker talks into a funnel connected with the disk by a rubber tube. When it is desired to read from the cylinder the disk is removed and a gutta-percha hammer is hung removed and a gutta-percha hammer is hung upon the bar, with a movable point which

rests again t the wax cylinder and follows the same course that the disk did when the pedals are moved. The hammer has two rubber tubes attached to it, the ends of which are curved so attached to it, the ends of which are curved so as to hang one on each ear of the listener. The reproduced words are loud and distinct. They can almost be understood without hanging the rubber tubes in the ears. The machine can be set up in a room devoted to typewright and stenographers, where lawyers and others may talk a good deal of their correspondence isto the funnel, from which their clerks will resto-duce the sounds and write out the lotters are other productions at their laisure other productions at their leisure.

## Suggestions for Reform in English Spelling.

At the meeting of the American Philological Association in Cleveland some years ago, a committee of that body reported substantially as follows, and its suggestions were approved

by the Association:
"Your committee finds it desirable and advisable to drop final silent e, as in genuine, leave, etc.; to drop a from ea, as in health, leave, etc.; to drop a from ea, as in health, feather, breakfast; to drop e from ea, hearken; to drop a from beauty; to drop o from jeopardy, leopard; to drop e from yeoman; to restore old u for e in govern, dozen, etc.; to restore i for o in women; to restore old u for ou in double, journey; to drop u from honour, etc.; to drop silent u after g in such native English words as guard; drop ue when at end, as in tongue, catalogue; to restore ryme for rhyme, and time for thyme; to simplify double consonants, as stif for stiff, batte for battle, taveler for traveller; to drop silent b in debt. traveler for traveller; to drop silent b in debt.

dumb, etc.; to restore old s for c when a consonant precedes, as onse for once, pense for pence; to restore k or c in words unetymolopence; to restore k or c in words unetymologically now written ch, as ache, anchor, stomach; to write t for ed. as in looked, booked; drop silent g as in felgn, foreign, and sovereign; make words in gh phonetic if possible, by dropping h, as ghost, aghast, though, or change gh to f, enuf for enough, drop l in could; drop p in receipt; drop s in aisle; change s to z in distinctive words, so as to distinguish clare from close abuse from shues; drop of in

s to z in distinctive words, so as to distinguish cloze from close, abuse from abuse; drop c in scent and scythe; drop t of tch, as in pitch, witch, etc.; drop w in whole; change ph to f." It must be said, however, that the only recent improvement in our orthography that has obtained general acceptance is in the spelling of the word programme, which is now quite generally spelt program, after the analogy of anagram, telegram, and the like.

### To Find a Person's Age, Etc.

The following table has been often printed, but is doubtless new to many readers of the Year-Book. The problem of another's age is easily solved by his noting the columns in which the figures representing it appear, and then adding together those at the head of such columns:

1/	2 8 6	4	8	16	82
8	8	5	9	17	83
5	6	6	10	18	84
7	7	5 6 7	11	19	85
8 5 7 9	10	12	12	20	86
11	10 11 14 15 18 19 23	18	10 11 12 13 14 15 24 25	91	86 87 88 89 40 41 42
11 13	1 12	14	17	21 22	90
10		15	12	66	96
15 17	10	10	13	1 .62	40
17	1 10	20	24	24	40
19 21	19	21	<b>25</b> 0	20	41
21	23	22	26	28 • 24 25 26 27	42
23	23	23	27	27	43
25	26	28	28	28	44
27	27	29	29	29	45
23 25 27 29	80.	23 29 29	30	29 80	46
81	25 25 25 25 25 25 25 25 25 25 25 25 25 2	81 36 87	27 28 29 80 81 40 41	81 48	44 45 46 47 48 49 50
81 83 85 87 89 41 48 45 47 49	84	88	40	48	48
85	95	87	41	49	40
87	¥6	962	42	50	- KA
90	96	88 89 44	40	Ki I	51
41	49	44	48 44	51 52	52
31	42	45	72	53	100
40	43	40	45 46 47 56		58 54 55 56
40	40	46 47	40	54	04
47	47	47	47	55	50
49	50	52	56	56	56
51	51 54	53 54	57	57	57 58
58	54	54	58	58	58
51 58 55	55	55	59	59	59
57 59 61	58	55 60	60	60	60
59	59	61	61	61	61
61	. 59 62	62	61 62	61 62	61 62
63	63	61 62 63	63	63	63
			, 50	, 30	

Tax French Republican Calendar, although reckoned from Sept. 22, 1792, was not intro-duced until Nov. 25, 1793. It remained in use duced until Nov. 25, 1793. It remained in use only till Dec. 31, 1805, when the Gregorian Calendar was restored. The months were: Vendémiaire (Vintage Month), Sept. 22 to Oct. 21; Brumaire (Foggy Month), Oct. 22 to Nov. 20; Frimaire (Sleety Month), Nov. 21 to Dec. 20; Kirôse (Snowy Month), Dec. 21 to Jan. 19; Pluviôse (Rainy Month), Feb. 19 Mar. 20; Gerninal (Budding Month), Mar. 21 to April 19; Floreal (Flowery Month), April 20 to May 19; Foreal (Flowery Month), April 20 to May 19; Foreal (Flowery Month), April 20 to May 19; Foreal (Flowery Month), June 19 to July 18; Thermidor (Hot Month), July 19 to Aug. 17; Fruetidor (Fruit Month), Aug. 18 to Sept. 16. The twelve months were divided into three

decades of ten days each, but to make up the 365 five were added at the end of September; the 17th (Primidi), dedicated to Virtue; the 18th (Duodi), to Genius; the 19th (Tridi), to Labor; the 20th (Quartidi), to Opinion; and the 21st (Quintidi), to Rewards. To Leap Year, called Olympic, a sixth day (Sextidi), "Jour de la Révolution," was added.

THE largest Empire in the world is that of Great Britain, comprising 8,557,658 square miles, more than a sixth part of the land of the globe, and embracing under its rule nearly a sixth part of the population of the world. In territorial extent the United States ranks third, containing 3,580,242 square miles, including Alaska; in population it ranks fourth with its 63.000,000 people. Russia ranks second, 8,354,940 square miles.

WATER when converted into steam increases in bulk 18,000 times; during the conversion of ice into water 140 degrees of heat are absorbed; heat rarifies air to such an extent that it can be made to occupy 5,500 times the space it did before; and air is about 816 times lighter than common water.

An English Blue-book lately issued gives the numbers of vessels contained in the navies of Europe, as follow: Battleships—England, 49; France, 30: Italy, 21; Germany, 13; Russia, 9; Cruisers—England, 97; France, 67; Germany, 29; Russia, 25; Italy, 21. Torpedo vessels and boats—England, 176; France, 140; Italy, 138; Russia, 97; Germany, 96.

A good article of grafting wax is made as follows: Take one pound of beeswax and four of resin, to which add one pint of linseed oil; heat slowly in an iron vessel, and mix thor-oughly. It may then be poured into cold water and pulled like molasses candy, until it takes on a light color. Then make into sticks.

THE following sentence of only thirty-four letters contains all the letters in the alphabet: "John quickly extemporized five tow bags."

PURIFIED platinum is the heaviest known substance, it having 21.58 times the weight

Hydrogen gas has the smallest specific weight of any known substance, it being only

### History of Street Lighting in London.

London was the first city in the world to en-joy the superior means of illumination which gas affords. The St. James Gazette says that regulations were issued more than 200 years ago calling on the inhabitants of London to hang out candles after sunset for the better security of way farers. This order would seem to have been disregarded, for in 1688 we find the Lord Mayor issuing a peremptory prescript enjoining all citizens "for the safety and peace of the city to hang out candles duly to the accustomed hour. Twenty years later the question was raised in Parliament, and an act passed granting additional powers "for the paving, cleaning, and lighting of the streets of London, Westminister, and Southwark." Six years previous to this legislation, Edward Heming obtained letters-patent granting him the exclusive right of lighting the streets of London for a given term of years, he contracting to place and maintain a candle-lantern before every tenth door, from 6 to 12 o'clock on all moonless nights between Michaelmas and Lady-day. But Heming's scheme, though re-garded as something prodigious by his con-temporaries, does not seem to have had the effect of securing the safety of benighted foot-passengers; for in spite of the additional powers conferred by the act of 1691, we read that in 1712 the midnight disturbers of the peace, known as Mohocks and Hawkabites, were in full swing, and "in the most inhuman and barbarous manner, without the least cause or provocation, assaulted and wounded those they met by night by slitting their noses. cutting off ears, gagging or distending their mouths wi h an iron instrument, and many other dreadful cruelties.

In or about 1604 the first oil-lamps were erected, their scene being the high-road from London to Kensington, where they were placed for the convenience of the court of William III, on its journey to and from the palace in that suburb. Then they gradually spread over London, superseding the candisaterns of Heming. But however brilliantly they may have appeared with Heming's, they did not succeed in rendering Kensington hich-road safe for pedestrians. Norden, the topographer, described Knightsbridge as a place "where I wish no true man to walk too late without a good guard," and so bad was the reputation of the more remote part of the road that pedestrians walking to and from Kensington after sunset toward the close of the last century were careful to go in strong bands, bells being rung at stated intervals to announce to would-be members of a party that one was on the point of starting. Complaints of the inefficiency of the lighting of London, and the consequent depredations emmitted even in the heart of the cuty at night, led in 1736 to parliamentary enactment on the subject; but the power was already at work, though only in its infancy, which was

to reform the entire system.

In 1733 Sir James Lowther reported to the Royal Society a spontaneous evolution of coal-gas in the colliery at Whitehaven, and that the gas being conveyed by a tube to the air had burnt for nearly three years without cessation. Experiments with coal-gas had been made earlier by Dr. Clayton, Dean of Kildare, but they had led to nothing practical and it was reserved for Dr. Watson, in the middle of the eighteenth century, to discover the means of washing and conveying the new illuminator safely, and for Murdoch, the Cornish engineer, forty years later, to venture upon its use for the lighting of his own and other propie's houses. In 1798 Murdoch built the first gasworks of any magnitude at Messrs. Boulton & works of any magnitude at Messrs. Boulton &

Watt's factory at Soho, near Birmingham, where a great sensation was made by a triumphal illumination on the peace of 1802, and six years later Murdoch received the gold medal of the Royal Society as the reward of his ingenuity and perseverance. Though the adaptability of gas for lighting purposes was thus proved, the cleansing process was yet very defective.

With a view to improvement in this and

With a view to improvement in this and other defects, a series of experiments were made by a German named Winsor at the commencement of the present century. In 1808 his first experiment was made, the La ceum Theatre being for the first time lit with gas. A course of lectures delivered by Winsor explaining his system during the following year led to the formation of the first gas company, with a capital of £50,000, the whole of which was expended in experiments without bringsing any return to the shareholders. Three years later Winsor exhibited his new light in a row of lamps in front of a colonnade before Carlton House, then standing in Waterloo Place. But this scheme was ridiculed by the scientific authorities of the day, and his application for a charter in 1809 for the National Light and Heat Company was refused at the instance of Murdoch, who, however, subsequently withdrew his opposition, and the company was incorporated. Still, public prejudice remained unconquered. Still, public prejudice remained unconquered of the moon to light London as to succeed in doing so with gas," and in 1813 the inquest-men of St. Dunstan's prosecuted William Sturt, of No. 185 Fleet street, for "the making of gas-light, and making and causing to be made divers large fires of coal and other things, by reasons whereof, and divers noisome and offensive stinks and smells and vapors, he causes house and develings near to be unhealthy."

In spite of prejudice and opposition the work went on, and in 1814 William Knight started a company and built gas-works at Whitefriars, and on Christmas day of that year the fate of the old oil-lamps was sealed; the metropolis was for the first time generally lighted with gas. By 1822 Winsor's company already owned 122 miles of pipe in the London streets and was supplying 89,000 cubic feet of gas nightly, and twenty years later there were no fewer than eighteen public gas works in London, employing a capital of £2,800,000 and manufacturing 1,460,000,000 cubic feet of gas per annum. The last public place in London to adopt the new fangled illumination was Grosvenor Square, which resisted the tide of progress until 1842. Then at length the street oil lamp finally disappeared and the race of linkmen became extinct, nothing remaining to remind the Londoners of their existence except the great extinguishers, which may still be seen at the doorways of many old houses. Gas had won the supremacy which it has now maintained for three-quarters of a century.

The largest library is the Bibliotheque National in Paris, founded by Louis XIV. It contains 1,400,000 volumes, 600,000 phamphlets, 175,000 manuscripts, 300,000 maps and charts, and 150,000 coins and medals. The collection of engravings exceeds 1,800,000, contained in some 10,000 volumes. The building which contains these treasures is situa ed on the Rue Richelieu. Its length is 540 feet, its breadth 130 feet. The largest library in New York, in respect of separate works, is the Astor. About 190,000 volumes are on its shelves.

#### Foods for the Sick.

[Corrected for the Year-book by Henry F. Lyster, M. D., of Detroit, Professor in the Michigan University Medical School and Member of the State Board of Health.]

The meat-juice foods as usually prepared are little better than pure stimulants. They are not properly foods, and do not supply nutriment to the body. An animal will starve just about as soon on beef-tea alone as it would without it. In the preparation of beef-tess, soups, and broth for the sick, some food must be incorporated with it. The recent peptynized beef extracts are more valuable as foods. Milk is the best of all foods for the sick.

BEEF-TEA.—In the preparation of beef-tea, according to the following recipe, the albumen of the tissue is preserved in a fluid form and is easily assimilated, forming a true food: Take a pound of fresh beef off the round, and scorch it quickly and very slightly on one side before the coals, cut it up as fine as hash, put it in an earthen bowl and pour on half a pint of tepid water (not over 90° F.), and let it stand for two hours in summer temperature near the stove, covered by a saucer, on the kitchen mantelpiece. Then strain and squeeze through manterpiece. Then strain and squeeze through clean linen, take the expressed juice and put it in a thick pie-dish on the back of the stove, and stir steadily for five or ten minutes. Never let it get warmer than 150? Try the temperature by the finger. When it takes a darker hue, as butternut or walnut shade, it is done. Season with a little salt. If you heat it up to 190°, all the albumen will coagulate, and it will be spolled as a food. You may depend upon the deepening of the color. This beef-juice has a cooked flavor and is of a port-wine color. It is a valuable food.

MILE PORRIDGE .- Two cups of best oatmeal, two cups of water, two cups of milk. Soak the oatmeal over night in the water; strain in the morning, and boil the water half an hour. Put in the milk with a little salt, boil up well, and serve. Eat warm, with or without powdered sugar. In very warm weather the oat meal may sour by morning, and there is a desicated oatmeal now sold which can be used with out soaking over hight

SOFT-BOILED EGGS .- Pour boiling water on

a fresh egg in a tea-cup, cover with a saucer, and let it stand for five minutes or more. If two eggs are to be cooked, a small bowl may be used. This plan prevents the coagulation of the white, and is very delicate.

Sorr Toast.—Some invalids like this very much indeed, and nearly all do when it is nicely made. Toast well, but not too brown,

a couple of thin slices of bread; put them on a warm plate and pour over bolling water; cover quickly with another plate of the same size, and drain the water off; remove the upper plate, butter the toast, put it in the oven one minute, and then cover again with a hot plate and serve at once. Toast, however, has

plate and serve at once. Tossi, however, has lately been looked upon as rather indigestible, and is no longer prescribed as a light food. CHICKEN JELLY.—Half a raw chicken, pounded with a mallet, bones and meat together, plenty of cold water to cover it well—about a quart. Heat slovly in a covered versel, and let it simmer until the meat is in white rags and the liquid reduced one-half. Strain and press, first through a colander, then through a coarse cloth. Sait to taste, and pepper if you think best; return to the fire, and simmer five minutes longer. Skim when cool. Give to the patient cold—just from the ice—with unleavened waters. just from the ice — with unleavened waters. Keep on the ice. This recipe should be used with the caution that long cooking of meat or vegetables changes the normal albumen into

complex bodies, which are not easily digested.

Are not pully digested.

Are not easily digested.

Are not easily digested.

Are not easily digested.

Bermuda two heaping teaspoonfuls best Bermuda arrow-root, one teaspoonful lemon juice, and two teaspoonfuls white sugar. Wet the arrowtwo teaspoontius white sugar. Wet the arrow-root in a little cold water, and rub smooth. Then stir into the hot water, which should be on the fire and actually boiling at the time, with the sugar aiready melted into it. Stir until clear, boiling steadily all the while, and add the lemon-juice. Wet a cup in cold water and pour in the jelly to form. Eat cold with sugar and cream flavored with reswater if sugar and cream, flavored with rosewater if

you like.—Successful Housekeeper.
Soup for an Invalid—Cut in small pieces one pound of beef or mutton, or a part of each; boil it gently in two quarts of water, take off the scum, and when reduced to a pint, strain it. Season with a little salt, and take a teacupful at a time.—Ibid.

GRUEL.-Gruel can be made from oatmeal, wheat flour, or cornmeal. In all cases these things should be first mixed smoothly, with a little cold water, and afterwards more water added; boil, and season to taste. Two table-spoonfuls of any of them is enough to make one pint, when boiled. A few raisins boiled in gruel is an improvement.—Presbyterian Cook-book.

### To Keep Well in Cold Weather. Never lean with the back upon anything |

that is cold. Never begin a journey until breakfast has

been eaten. Never take warm drinks, and then immedi-

ile.

Active take warm drinks, and their limited active go out into the cold.

Keep the back, especially between the shoulder-blades, well covered; also the chest well protected. In sleeping in a cold room establish a habit of breathing through the nose, and never with the mouth open.

Never go to bed with cold or damp feet. Never omit regular bathing, for unless the skin is in active condition the cold will close the pores and favor congestion and other

After exercise of any kind never ride in an open carriage or near the window of a car for a

when hoarse speak as little as possible until
the hearseness is removed, else the voice may
be paramently lost or difficulties of the
thrist he produced.

Menty warm the back by the fire and never

continue keeping the back exposed to the heat after it has become comfortably warm. To do otherwise is debilitating.

When going from a warm atmosphere into a colder one keep the mouth closed, so that the air may be warmed in its passage through the nose ere it reaches the lungs

Never stand still in cold weather, especially after having taken slig texercise, and always avoid standing on ice or snow or where the person is exposed to cold wind.

OF numerous methods for purifying drinking water, the following by Professor Wilber, of Rutgers College, is very simple: Dissolve half an ounce of alum in a cup of boiling water, pouring into a quart measure, and filling up with cold water. Keep it in a bottle labeled "alum solution." An ordinary teasure, or the state of the sta spoonful is the right amount to add to a gallon of water. No harm would be done if two. or ten, were added; one is sufficient. As different waters vary, it may be found that less will answer.

### Bibles, and the Bible.

The seven Bibles or sacred books of the are the Koran of the Mohammedans. the Eddas of the Scandinavians, the Try-Pitikes of the Buddhists, the Five Kings of the Chinese, the three Vedas of the Hindoos, the Zendavesta, and the Scriptures of the Jews and Christians—the Old Testament for Jews and Christians—the Old retained to the former, and both the Old and New Testaments for the latter. The Koran is the most recent of these, and is not older than the seventh century of our era. It is largely a compound of quotations from the Old and New Testaments, the Talmud, and the Gospel of St. Barnabas. The Eddas of the Scandinavians were first published in the fourteenth century. The Pitikes of the Buddhists con tain sublime morals and pure aspirations; their author lived and died in the sixth century before Christ. There is nothing of high excellence in these books not found in our The sacred writings of the Chinese are called the Five Kings, king meaning web or cloth, or the warp that keeps the threads in their place. They contain the best sayings of the ancient Chinese sages on the thico-political duties of life. These sayings cannot be traced to a period higher than the elevent century a. c. The three Vedas are the most ancient books of the Hindoos, and it is the opinion of Max Müller, Wilson, Johnson, and Whitney that they are not older than eleven centuries B. c. The Zendavesta of the Persians is the grandest of all sacred books, next to our Bible. Zoroaster, whose sayings it contains, was born in the twelfth century B. C. Moses lived and wrote his Pentateuch fifteen centuries B. C., and therefore has a clear margin of 300 years older than the most ancient of all other so-called sacred writings.

The Hebrew and Christian Scriptures received in the fifth century A. D. the collective title Biblia, the books above all others - now the Bible, sometimes called by eminence the Book of Books. The Old Testament was written in Hebrew, except small parts of Ezra and Daniel, which are in Chaldee. The New Testament was written altogether in Greek, though many think the Gospel of Matthew, prepared primarily for the Jewish readers, was first published in the Aramaic dialect of Hebrew Hebrew. The Jews have also in Hebrew great books of commentaries and interpretations, called the Gemaras and the Mishna, which combined constitute the Jerusalem and Babylonian Talmuds. The Targums are older than these, are written in Chaldee or Aramaic, and furnish explanatory paraphrases and elabora-tions of the Scripture text, after the following fashion:

And the earth was waste and empty; and darkness was upon the face of the abyss; and a wind from the Lord breathed over the face

of the waters."

"But the earth was confusion and empti-ness, destitute of the sons of men and bare of all cattle; and darkness was upon the face of the abyss, and the spirit of mercies from be-fore the Lord breathed over the surface of the water.'

And the Lord created man in his own likeness; in the image of the Lord created He him, with 248 members and 355 sinews, and clothed him with a skin and filled him with fiesh and blood; male and female in their body created He them."

their body created He them.'

The entire Bible consists of 66 books and 1189 chapters. Its middle chapter, the smallest in the book, is Psalm 117; the middle verse Psalm 118:8. Exra 7:21 in the English Bible has all the letters of our alphabet, except ; 2 Kings, 19, and Isaiah, 37, are chapters almost exactly alike.

The Old Testament contains 89 books, believed to have been written in the following order: Job (probably in the 16th century before Christ), Genesis, Exodus, Leviticus, Numbers, Deuteronomy (these constitute the Pentateuch, or five books of Moses), Joshus, Pentateuch, or five books of Moses), Joshus, Judges, Ruth, 1st and 2d Samuel, Psalms, Song of Solomon, Ecclesiastes, Proverbs, Joel, Jonah, Amos, Hosea, Isaiah, Micah, Ist and 2d Kings, Nahum, Zephaniah, Jeremish, Lamentations, Hababkuk, Daniel, Ezekiel, Obadiah, Haggai, Zechariah, Ist and 2d Chronicles, Ezra, Esther, Nehemiah, Malachi, In modern arrangement, dating for both In modern arrangement, dating for both Testaments from the latter half of the 18th century, the 39 books are divided into 229 chapters and 23,214 verses, which in the King James (English) Bible contain 592,439 words and 2,723,100 letters. The middle book of the Job. 29; middle verse, 2 Chron., 20:17; least verse, 1 Chron., 1:1.

The New Testament comprises 27 books, by

The New Testament comprises \$7 books, by nine authors, accounting the Epistle to the Hebrews to have been written by another than Paul, as the weight of authority now holds. The probable order of composition in time is as follows, and there are marked alvantages in the occasional reading of the Testament in this order: 1st and 2d Thessalonians, 1st and 2nd Corinthians, Galatians, Romans, Matthew, Luke, Mark, Acta Philelonians, 1st and 2nd Corinthians, Galatians, Romans, Matthew, Luke, Mark, Acts, Philemon and Celossians. Ephesians, 1st Timothy, Titus, 2d Timothy, James, 1st and 2d Peter, Jude, Hebrews, Revelations, John's Gospel, 1st, 2d, and 3d John. The books have 200 chapters, 7059 verses, and in the King James version 181,258 words and 838,380 letters. Its middle book is 2d Thessalonians; middle chapters, Romans, 18, 14; middle verse, Acts, 17:17; least verse, John, 11:35.

The Old Testament Apocrypha is received by the Catholic churches as canonical, but not by the Protestants, although the Church of England permits it to be read "for example of life and instraction of manners." Its often bound in with the canonical Scriptures,

ple of life and instruction of manners." It is often bound in with the canonical Scriptures, between the Old and New Testaments, and includes 14 books—1st and 2d Eadras, Tobit, Judith, The Rest of Esther, Wisdom of Solomon, Ecclesiasticus, or the Wisdom of Jesus the Son of Sirach, Baruch and the Episties of Jeremiah, The Song of the Three Children, The Story of Susanna, Bel and the Dragon, The Prayer of Manasses [Manasseh], ist and 2d Maccabees. These are divided into 183 chapters and 6081 verses. There is also a New Testament Apocrypha, nowhere of canonical authority, and included in none of our Bibles. It has no less than 22 Gospels, 10 in Greek and 12 in Latin; 18 Acts of the Apostles. Greek and 12 in Latin; 18 Acts of the Apostles. all originally in Greek; and ? Apocalypees or books of Revelation. Some of them are of slight historical or critical value.

The perusal of the whole Bible may be com-

The perusal of the whole Bible may be compassed in a year, by reading three chapters each week-day and five on Sunday. Some chapters of peculiar interest and profit are the Bottomless chapter, Ephesians 3; the Character chapter, Job 29; the Wisdom chapter, 28th of the same. The Rest chapter is Hebrews 4; Resurrection chapter, 1 Corinthians 15; and Victory is well described in Romans 8. For Duty read Ezekiel 33, and Work, James 2. Courage is in Joshua 1, which with the Convert's chapter, Isalah 12, forms a harmonious duet. Paslm 12! is for the Traveler, while 51st is for the Prodigal. Luke 15 is the Lost and Found chapter. The Minister's chapter is Ezekiel 34, while Charity Minister's chapter is Ezekiel 34, while Charity is the beginning and end of 1 Corinthians 13. For Atonement read Hebrews 9, and then

Leviticus 16. None will know how to Fast till they read Isalah 58, nor can Promises be found that reach higher up or go farther down than in John 14. The Blessing chapter is Deuteronomy 28, and where is Heaven spoken of so beautifully as in Revelations 21? When one feels his feet slipping, he should go to the Rock chapter, Deuteronomy 32. Hypocrites should read their chapter, Matthew 22. Come is the keyword of Isalah 55, and Gifts of 1 Corinthians 12. Special studies may also be made of the seven blessings in Revelation, the five precious things in Feter's letters, the seven walks in Ephesiaus, and the seven "to-

rethers" in Galatians, and the seven in John's Gospel that were saved.

THE BIBLE

Study it carefully;
Think of it prayerfully,—
Deep in thy heart let its pure precepts dwell;
Slight not its history;

Ponder its mystery.— None can e'er prize it too fondly or well;

Accept the glad tidings,
The warnings and chidings,
Found in this volume of heavenly lore;
With faith that 's unfailing,

And love all-prevailing,
Trust in its promise of life evermore.

#### The International Sunday

The International Lesson Committee report for the remaining five years of their term of service lessons as follow: For 1889, six months in Mark and six months in the Old Testament; 1890, twelve months in Luke; 1891, nine months in the Old Testament, three months in John 1892, six months each in John's Gospel and other New Testament writings, and in the Old Testament; 1893, three in the Old Testament and nine in the Acts and Epistles

The lessons for 1889 are the following Jan. 6-The mission of John the Baptist. Mark 1:1-11.

Jan. 13-A Sabbath in the Life of Jesus.

Mark 1:21-34. Jan. 23—Healing of the leper. Mark 1:35-Jan. 27—Forgiveness and healing. M.

2:1-12. Feb. 3-The parable of the sower. Mark

4:10-20. Feb. 10—The flerce demoniac. Mark Feb. 17—The timid woman's touch. Mark 5:1-20.

Mark Feb. 24—The Great Teacher and the Twelve. Mark 6:1-13.

March 3—Jesus the Messiah. Mark 8:27-9:1. March 10—Christ's love to the young. Mark 10:13-32.

March 17—The childlike spirit. Mark 9:33–42. March 24—Blind Bartimeus. Mark 10:46–52. March 31—Review, or temperance (Eph. 5:15-31) or missionary (Isa. 35:1-10) lesson.

April 7—The triumphal entry. Mark 11:1-11.

April 14—The rejected son. Mark 12:1-12.

April 21—The two great commandments.

Mark 12:28-34.

April 28—Destruction of the temple fore-told. Mark 13:1-13.

May 5-The command to watch. Mark 13:24 37. May 12-The anointing at Bethany. Mark

14:1-9. May 19—The Lord's Supper. Mark 14:1 May 26—Jesus betrayed. Mark 14:43-54 June 2—Jesus before the Council. Mark 14:12-26.

14:55-65. June 9-Jesus before Pilate. Mark 15:1-20.

June 16—Jesus crucified. Mark 15:1-39. June 23—Jesus risen. Mark 16:1-13.

-school Lessons for 1889.

June 30—Review, or temperance (1 Cor. 8:4-18) or missionary (Mark 16:14-20) lesson. July 8:1-14. 7-Samuel called of God.

July 14—The sorrowful death of Eli. 1 Sam.

4:1-18. July 21—Samuel the reformer. 1 Sam. 7:1-12. July 28—Israel asking for a king. 1 Sam.

8:4-20. Aug. 4—Saul chosen of the Lord. 1 Sam. 9:15-27.

Aug. 11—Samuel's farewell address. 1 Sam. 12:1-15.

Aug. 18—Saul rejected by the Lord. 1 Sam. 15:10-23.

Aug. 25—The anointing of David. 1 Sam. 16:1-13.

Sept. 1—David and Goliath. 1 Sam. 17:32-51, Sept. 8—David and Jonathan 1 Sam. 20:1-18. Sept. 15—David sparing Saul. 1 Sam. 24:4-17. Sept. 22—Death of Saul and his sons. 1 Sam. 81:1-18.

29.—Review, or temperance (1 Sam. Sept. 25:23-31 and 85-88) or missionary (Ps. 67:1-7) lesson.

Oct. 6-The tribes united under David. 2 Sam. 5:1-12. Oct. 13-The ark brought to Zion. 2 Sam.

6:1-12. Oct. 20—David's thanksgiving prayer. Sam. 7:18-29.

Oct. 27-Sin, forgiveness, and peace.

32:1-11. Nov. 8—David's rebellious son. 2 Sam. 15:1-12.

Nov. 10-David's grief for Absalom. 2 Sam. 18:18-33.

Nov. 17—David's last words. 2 Sam. 23:1-7. Nov. 24—Solomon's wise choice, 1 Kings **3:5–15.** Dec. 1—The temple dedicated. 1 Kings.

Dec. 8-Solomon and the Queen of Sheba.

Dec. 5—Solomon's fall, 1 Kings 11:4-13, Dec. 15—Solomon's fall, 1 Kings 11:4-13, Dec. 22—Close of Solomon's reign, 1 Kings

11:26-43

Dec. 29-Review, or temperance (Prov. 23:29-35) or missionary (Ps. 110:1-7) lesson.

# Normal Class-work for Six Months.

Some years ago an arrangement was made by the Sunday-school workers of Burlington, Iowa, for a half-year's concerted normal study, upon a plan so admirable that it de-serves generalizing and perpetuating. Ses-sions were held on the first and third Wednesday of each month, and at each session a Biblical topic was considered, and another upon a practical phase of the work, as follow:

I. The books of the Bible: their authorship
and classification. The Teachers' Bible, and

Wy to use it.

II. The Bible a divine book: evidences and Miration. How to use the concordance.

III. Same first topic. How to use commentaries and helps.

IV. Same first topic. Difficulties in teaching. V. Bible history and chronology. Mistakes in teaching.

VI. Same first topic. How to secure attention.

VII. Same first topic. Analysis of the lesson.
VIII. Bible manners and customs. Illustrating the lesson.
IX. Same first topic. The art of questioning.

X. Same first topic. Practice in framing

questions XI. Bible interpretation. Cultivating th memory.

History of the Sunday-school.

In England Joseph Alleine, author of the "Alarm to the Unconverted," established the first Sunday school of which there is definite record in that country, as early as 1688. Bishop Lathbury started the next in 1693; The-Bisnop Lathbury started the next in 1693; The-ophilus Linsey, of Catterick, the third, in 1763. Two years afterward Miss Catharine Harrison, afterwards Mrs. Cappe, established one at Bedale, and Miss Ball followed her ex-ample at High Wycombe in 1769. In 1770, Dr. Kennedy, curate of Bright parish, in the County of Down, hired a man to help him get together the profian wouth of the neighbor. together the profaue youth of the neighbor-hood on the Sabbath. Having accomplished together the profine youn of the neighborhood on the Sabbath. Having accomplished this, he taught the boys and girls psalmody, gradually adding Seriptural instruction, until in 1778 a regular school was established. Robert Raikes, at a young lady's suggestion, hired in 1781 four women at a shilling a day to teach the Gloucestershire street Arabs on the Sabbath. In 1803 the London Sunday-school Union was started.

In Scotland David Blair instituted a Sabbath evening school in Brechin. Rev. Mr. Morri-son, of Norham, did much the same thing son, of Norman, did much the same thing three years earlier. As early as 1773, in re-mote corners of the country, schoolmasters were appointed to convene the children in Sunday gatherings, for religious exercises and instruction. Raikes's Gloucestershire schools having become extinct after the death of their founder, they were revived in 1810 by six young men with unpaid teachers. A young minister named Martin organized the first

French Sabbath-school in Bordeaux in 1815. In 1819, Richard Cook set up a Methodist school in Normandy. The first Parisian enter-prise of the kind was due to Mr. Monard. In 1828 there were 80 schools. In 1846 a Sunday-1828 there were 80 schools. In 1846 a Sunday-school magazine was started, and in 1862 the Lutheran, Methodist, Independent, and Bap-tist churches started a Sunday-school Union.

In America the institution was established in 1674, the elders of the church acting as Rev. John Fitch in 1675 drew up a teachers. teachers. Kev. John Fitch in 1676 drew up a covenant requiring the male children between eight and ten years to come into congregation and be catechized. The covenant was ob-served for thirty years. In 1747 Ludwig Hacker established the first American Sun-day-school of which there is anything definite known. It lasted over forty years. In 1788
Bishop Asbury organized a similar institution
in Hanover County, Va., and in 1786 the Methodist Conference admitted all poor children
without distinction of color to the schools. In 1791 Bishop White hired a company of teachers at Philadelphia for 83 cents a day, to give secular instruction to poor children About 1811 a Mr. Tracy formed an organization called the "Sunday and Adult School Society" into which upwards of 1,800 children were gathered. The American Sunday-school Children were gathered. The American Sunday-school

Union sprang from this, having risen in 1824. The New York Sunday-school Union was or-ganized in 1816; at its fourth anniversary it had 24 schools, 300 teachers, and about 4,000

pupils.

#### The Feminine Catechism.

The following sample of feminine reasoning is found in The Woman's Journal:

 Who rejected and crucified the Saviour? ns.—Men. Ans.

Who conducted the "ten persecutions of

Christians?" Ans.—Men. Who stretched men and women on the the Christians? 11 rack, and, after torturing, murdered those who looked at the same articles of faith in a different light from themselves? Ans .- Men.

4. Who founded authority on muscular might instead of moral right?" Ans.—Men. 5. Who alone have built up a system of

o. who alone have built up a system of jurisprudence to which every wife and honest person is afraid to appeal, all confessing that law and equity are wide as under? Ans.—Men.

6. Who have so managed our political life that it is a "hissing and a reproach?" Ans.—

7. Who are responsible for the financial policy which, with no excuse of war, pestilence, or famine, so cruelly presses on our material

prosperity? Ans .- Men. 8. Who settle great questions by fighting

them out? Ans,-Men.

9. Who profess regard for representative government, and withhold liberty from the majority? Ans.—Men.

10. Who make the claim that they are the lords of creation, and that wisdom will die with them, while all public offices belong to them alone? Ans.—Men.

11. Who scold and sneer at women's fashions,

and yet refuse courtesy to those who are dressed sensibly? Ans.—Men. 12. Who refuse to their own mothers the rights they claim for themselves, and make flattery take the place of respect? Ans.—Men. 13. Who teach reverence for women, while

despising their counsel and refusing to hear

despising their counsel and retaining to hear their voices? Ans.—Clergymen.

14. Who inculcate purity of heart, and yet are so confined to the sentiment of sex that they decide from the shape of the body. in-ad of attributes of the soul, in admitting ididates for the ministry? Ans.-Clergymen.

15. Who are so obstinate in their self-conceit, and so fond of doing all the talking that they will not allow a word from any representative of the majority in the church? Ans.—Clergymen.

16. Who require women to promise obedience in the marriage service? Ans.—Clergymen (except among the Methodists).

17. Who point the way of humility, courtesy,

and self-denial to women, but refuse to lead the march. Ans.—Clergymen. 18. Who love the uppermost seats in every

place? Ans.-Clergymen.

IT HAS always been the custom of the city of Paris to present the bride of the reigning sovereign with a gift on her wedding day When the Empress Eugenie was chosen to share the throne of Napoleon III., the city voted 600,000 francs for the purchase of a diamond necklace for her. But the Empress mond necklace for her. But the Empress caused her wish to be made known that the caused her wish to be made known that the sum voted, instead of being expended in dia-monds, should be employed in founding a school for the poor girls of the Faubourg St. Antoine; and this institution will always be one of the brightest jewels in the Empress's crown

In climates having a difference of 70 degrees in temperature between the hot and cold seasons, a railway track of 400 miles is 338 yards longer in summer than in winter. Of course the length of the road remains the same, but expansion forces the lengths of metal closer together, making an aggregate closing up of space between the rails of nearly a yard in each mile.

THE first profile taken, as recorded, was that of Antigonus, one of Alexander's gener-als, who had but one eye, and so had his likeness taken at side view.

"You never saw my hands as dirty as yours," iid a mother to her little girl. "No, but said a mother to her little girl. grandmother did," was the reply.

#### Words of Wisdom.

Some things you may have without seeking, some you may seek and not find; but there are things, and those you most need, that you will

when you cannot do as you like, the best thing is to like what you do.—George Mac-Donald.

Men show their character in nothing more clearly than by what they think laughable. Goethe.

If you would create something, you must be

something.—Ibid.
All the way to heaven is heaven.—Canon

Farrar. There is little influence where there is not

great sympathy Upon my word I think truth is the hardest missile one can be pelted with.—George Eliot. Give what you have. To some one it may be

better than you dare to think.—Longfellow. A man lives by believing something, not by debating and arguing about things.—Carlyle. Life, if we look at it in Christ, is transfigured; death, if we look at it in Christ, is conquered.—Canon Westcott.

Let us help the fallen still, though they never payus; and let us lend without exacting

I have been benefited by praying for others; for making an errand to God for them, I have got something for myself.—Rutherford.

Mr. Spurgeon says, "Don't try to brush off the distribution of the same of the things.

mud while it is wet, - nor some other things,

eith⊲r. Nothing else should so diminish our selfsatisfaction as seeing that we disapprove at

one time what we approve at another.
General Jackson used to say, "Think before acting, but when the time for action comes, stop thinking."

Be wiser than other people if you can, but

do not tell them so.

Coming to the point is the law of achievement. Scattered forces never win a battle.— Frances Willard.

School-houses are the republican line of fortification.—Horace Mann.

That peace is an evil peace that doth shut truth out of doors. If peace and truth cannot go together, truth is to be preferred, and rather to be chosen for a companion than peace.

Heavenly thoughts are the only sure receipts for a countenance of heavenly expression.

Frances Willard.

A truth ascertained is a life-pension gained. Our character is but the stamp on our souls of the free choice of good and evil we have made through life.—Geikie.

made through life.—Geilie.
Every person has two educations—one which
he receives from others, and one, more im
portant, which he gives himself.—Gibbon.
If I can put one touch of a rosy sunset into
the life of any man or woman, I shall feel that
have worked with God.—George MacDonald.
The more believers love God, the more they
lave one another: as the lines of a circle the

love one another; as the lines of a circle, the nearer they come to the centre the nearer they come to each other.—Charnock,

Never be afraid of criticism or ridicule; always remember that opposition and calumny are often the brightest tribute that vice and folly can pay to virtue and wisdom.—R. B.

Hayes.
"Twas a thief said the last kind word to bindness and forgave hrist; Christ took the kindness and forgave

the theft.—Browning.

People don't grow famous in a hurry, and it takes a deal of hard work even to earn your bread and butter.—Louisa M. Alcott.

Very few people possess the gift of rhetorical eloquence; but it is within the reach of 

every follower of Jesus to rise to great elo-quence in life and conduct.—Dr. T. L. Cuyler.

The emptiness of all things, from politics to astimes, is never so striking to us as when we ail in them.—George Eliot.

The best form of responsive service is that

which consists in putting a good sermon into good practice.—Christian Register.

We can defile ourselves, but we cannot cleanse ourselves. The sheep can go astray alone, but can never return to the fold without the assistance of the shepherd .- W. Secker.

It is an awful condemnation for a man to be brought, by God's providence, face to face with a great possibility of service and of bless-ing, and then to show himself such that God has to put him aside, and look for other instru--Dr. McLaren. ments.

Sometimes passive courage is a nobler vir-tue, and one more difficult of exercise, than active courage. In the written code of pro-cedure which the Bible offers to the Christian, we find a good deal more said about sacrifices and humility than about crushing retorts or blows straight from the shoulder.—S. S. Times.

Under all speech that is good for anything, there lies a silence that is better.—Carlyle. Excellence of judgment lies between two extremes, viz., instability and obstinacy.— Sully.

As a means, the study of a foreign language is valuable; as an end, it is comparatively valueless.—Johonnot.

valueless.—Jononnoi.

If the student of history interprets it by any other light than the light of motives, he is journeying across an unknown sea without chart and compass.—Greenwood.

An ounce of mother is worth a pound of clarge Scotch equing.

clergy.—Scotch saying.

Let us live with our children; then will the life of our children bring us peace and joy, then shall we begin to grow wise, to be wise.— Froebel.

The hand intellectualizes the body. certain sense the mind itself is dependent upon it. All fineness of work comes from its sublime possibilities for high labor. Everything that proceeds out of the infinite delicacy of our

proceeds out of the infinite delicacy of our nature requires its service.—MacArthur.

Seneca once remarked: "If I should have one foot in the grave. I should still wish to learn." This desire to keep studying, to make new acquirements of knowledge, and to turn to fresh forms and phases of familiar truths, is a distinguishing feature of that old age which is lovely and useful even in the years of the octogenarian. "Spring still makes spring in the mind," says Emerson, "when sixty years are told;" and so a willingness to study and learn even in unfamiliar schools is a means and learn even in unfamiliar schools is a means of keeping a perpetual springtime of intellect and usefulness. The old deacon at least had the right idea in his mind when he prayed that his minister might be "ever learning, and never coming to a knowledge of the truth."— S. S. Times.

The average of human life is about thirtythree years. One-quarter die previous to the age of seven years, one-half before reaching seventeen Of every 1000 persons, seldom one reaches 100 years of life; of every 100, only six reach the age of sixty-five, and not more than one in 500 lives to 80 years of age. The married are longer-lived than the single. Women have more chances of life in their favor previous to being fifty years of age than men have, but fewer afterward. The longest lives are found in temperate climates, among country people.

WHALING grounds-school houses.

#### The Sunny Side.

"How old are you, Tommy?" "Nine when I'm on my feet and six when I stand on my head." "That's funny; how do you make it?" "Why, if you stand a 9 on its head it's a 6, isn't

Minister's wife (to husband): "Will you put up the parlor stove to day, dear?" Minister (vexatiously): "I suppose I will have to." Wife: "And don't forget, John, that you are a minister of the gospel."

It is no wonder that some people are talkative. Five gases enter into a man's composi-

Parent: "Who is the laziest boy in your class, Johnny?" Johnny: "Idunno." Parent:
"I should think you would know. When all the others are industriously writing or studying their lessons, who is he who sits idly in his seat and watches the rest, instead of working himself?" Johnny: "The teacher."

The only dairy which does not use water to

excess is the dromedary.

excess is the dromedary.

It is interesting to trace the evolutions of words and expressions. Cultivated people say, "How do you do?" Those who are less precise say, "Howdydoo?" In the backwoods of Tennessee they say, "Howdy?" The noble redman of the West says, "How?" While the cat on the fence says, "Ow?"

Fashionable wile—"Did you notice, dear, at the party last evening, how grandly our daughter, Clara, swept into the room?"

Husband—"Oh, yes, Clara can sweep into a room grandly enough, but when it comes to sweeping out a room she isn't there."

sweeping out a room she isn't there."

Talmage says that "the man who can sing and won't sing should be sent to Sing Sing. That would be too severe. It is the man who can't sing and will sing who should be sent to

Sing Sing. Is there any difference between a journalist and an editor? Yes; the journalist is a man who writes things for newspapers. The edi-tor is the man who leaves out what the

journalist writes.

"What have you got in the shape of oranges?" "Only cound ones, sir!"
"Professor," said a graduate, trying to be pathetic at parting, "I am indebted to you for all I know." "Pray do not mention such a trifle," was the not very flattering reply.

The obliging visitor, to show that he is

really fond of children, and that the dear little ones are not annoying in the least, treats the youngest to a ride upon his knees, "Trot, trot, trot! How do you like that, my boy! Is that nice?" "Yes, sir," replied the child; "but not so nice as on the real donkey—the one with four legs."

"What do you grow on this land?" he inquired of a farmer who was leaning over a fence inspecting a particularly barren piece of ground. "Grow lazy," was the satisfac-

of ground.

tory reply.

What is the difference between a High
Churchman and a Baptist? The one uses

candles, the other dips.

"Does your mother wear felt slippers!" asked an old lady of a little boy where she was visiting. "Yes, ma'am, she do. I've felt 'em," answered the small boy, significantly.

Where's the impropriety in calling a Boston boy a Hub-bub?

A little girl was sitting at a table opposite a gentleman with a waxed moustache. After gazing at him for several moments, she exclaimed, "My kitty has smellers, too."

Jealousy is the meanest of all human pas-

sions; but that doesn't prevent it from being

funny in a dog.

One of the saddest trials that comes to a girl when she marries is that she has to discharge her mother and depend upon a hired

girl.
"I have heard of a man," said a lecturer, "who can speak fluently thirteen different

languages, including the profane,"

"How ni'ely the corn pops," said a young man who was sitting with his sweetheart be-fore the fire. "Yes," she innocently responded, "it's got over being green."

CRADLE SONG, Sleep, little bub!

Thy father has gone to the club; Thy mother is out to a grand soiree,-So swallow thy b-autiful catnip tea. Sleep, little bub!

Some people have softening of the brain, but the world suffers more from those who

have hardening of the heart.
"With reverence let the saints appear,

And bow-ow-ow before the Lord, was what Dr. Talmage once heard sung in church.

Backwoodsman to tourist: "Pitch right in, pardner, and make yourself to hum. got manners here, but we don't use um."-

Life.
There is a good deal of billing and cooling done at the seaside. The hotel men do the

billing .- Life.

Farmer's wife to passing boy: "Did you see any cows in the corn down in the lot youder?" "No, ma'am," he replied as he lifted his hat, "I didn't see any cows in the corn, but I did see some of the corn going into the cows."—Life.

Said Warren the comedian, "I know of but one man who was not spoiled by being lion-ized, and that was the prophet Daniel."-Life.

Query: Are Michiganders any relation to the Portuguese? If so, how much, and what? "Never mistake perspiration for inspiration," was what Spurgeon said to a young

Passenger (on street-car, alarmed):
"Madam, do you feel a fit coming on!"
Madam (haughtily): "No, sir, I'm trying to
find my pocket."
Old later (fr.

Old lady (in drug store, to small boy.)—
"What am I to take this medicine in, sonny?" Sonny-"Take it in your mouth, mum. Tain't to be rubbed on."

#### Conundrums.

Why is an inclined plane like a lame dog? Because it is a slope up.

There is a word of only five letters, and if

you take away two ten will remain; what is the

word? Often. What letter has never been used more than

twice in America? The letter A

When are stockings like dead men? When they are men-ded; or, perhaps, when their souls are departed; or again, when they are all in holes; or, when they are in toe-toe; or, when they are past heeling; or, when they are no longer on their last legs.

Here is a good conundrum: Why is a pig looking out of a second-story window like the moon? Because he looks round. If anybody triumphantly retorts that the moon does not always look round, you can reply that the pig doesn't either.

How many soft-boiled eggs could the giant Goliath eat on an empty stomach? One, after which his stomach would not be empty.

What two letters will be of great value to you in old age? N and g, because they will make you young.

# The United States.

#### The Federal Government.

EXECUTIVE DEPARTMENT.

President—GROVER CLEVELAND, of New ork. President-elect, to be inaugurated arch 4—BENJAMIN HARRISON, of Indiana. York. March

March 4—BENDARIN THREIDUS, V. HIGHMAN Salary, \$50,000 a year. Vice-President — Vacant by the death of THOMAS A. HENDRICKS, of Indiana. Acting Vice-President by election as President of the Vice-President by election as President of the Senate protempore, John J. Ingalls, of Kansas. Vice-President-elect, Levi P. Morton, of New York. Salary, \$8000.

Serretary of State—Thomas F. Bayard, of Delaware. Salary, \$8000.

Secretary of the Treasury—Charles S. Fairchild, of New York. Salary, \$8000.

Secretary of War—William C. Endicott, of Massachusetts. Salary, \$8000.

Secretary of the Navy—William C. Whitney, of New York. Salary, \$8000.

Postmaster-General - Don M. Dickinson, of Michigan. Salary, \$800.

Michigan. Salary, \$800).

Secretary of the Interiorof Wisconsin. Salary, \$800 -William F. Vilab.

Wisconsin. Salary, \$8000. Attorney-General—Augustus H. Garland,

Attorney-General—Augustus H. Garland, of Afransas. Salary, \$8000.
Commissioner of the General Land Office—S. M. Stockslager, of Indiana. Salary, \$4000.
Commissioner of Patents—Benton J. Hall, of Iowa. Salary, \$4500.
Commissioner of Pensions—John C. Black, of Illiaois. Salary, \$5000.
Commissioner of Agriculture—N. J. Coleman, of Missouri. Salary, \$4500.
Indian Commissioner—James H. Oberly,

Indian Commissioner of Illinois Salary. \$400

Salary, \$4000. Census—J. H. WARDLE, of New Chief of Census—York. Salary, \$5000.

York. Salary, \$5000.

Commissioner of Education—N. H. R. Dawson, of Georgia. Salary, \$3000.

Commissioner of Labor—C. D. Wright, of Massachusetts. Salary, \$5000.

Commissioner of Railroads—J. E. Johnston, of Georgia. Salary, \$3000.

Director Geological Survey-J. W. POWELL.

Director Geological Survey—J. W. POWELL. Salary, \$6000.
Civil Service Commissioners—Alfred P. Edgerton, of Indiana; Charles Lyman, of Connecticut; (one vacancy); salaries \$3500.
Chief Ezaminer—Wm. H. Webster, of Consecticut, Salary, \$3000. Secretary—John T. Doyle, of New York. Salary, \$1600.

U. S. SUPREME COURT. Chief Justice — MELVILLE W FULLER, of Illinois, appointed 1888. Salary, \$10,500. Eight Associate Justices, at \$10,000: Samuel F. Associate Justices, at \$10,000: Samuel F. Miller, fowa, appointed 1862; Stephen J. Field, California, 1863; Joseph P. Bradley, New Jersey, 1870; John M. Harlan, Kentucky, 1877; Stanley Matthews, Ohio, 1881; Horace Gray, Massachusetts, 1881; Samuel Blatch ford, New York, 1882; Lucius Q. C. Lamar, Mississippi, 1888.

U. S. ARMY. The maximum force allowed the army by existing law is 2155 commissioned officers and

25,000 enlisted men.]
Major-Generals—John M. Schofield (commander), Oliver O. Howard, George Crook. mander), Oliver Pay. \$7500 each.

Brigadier Generals—Nelson A. Miles, David S. Stanley, John Gibbon, T. H. Ruger, Wesley Merritt, John R. Brooke. Pay, \$5500 each. All of the officers above named receive an allowance for quarters, fuel, and forage, in addition to their pay proper.

44

idition to their pay proper.
U. S. NAVY.

Admiral—David D. Porter. Pay, \$13,000.

Five Admiral—Stephen Rowan. Pay, \$9000.

1891; M. S. Quay, R., 1893.

Rear-Admirals—John L. Worden, E. Y. Mc-Cauley, Samuel R. Franklin, Stephen B. Luce, John Lee Davis, John E. Jouett, Ralph Chand-Pay \$6000.

Twenty-one Commodores on the active list receive \$3000 each; Captains, \$4500 each; lieutenant-Commodores, \$3000 each.

THE SENATE-FIFTIETH CONGRESS.

President pro tempore—John J. Ingalls. Salary, \$8000.

Alary, \$5000.
Chaplain.—Rev. J. G. Butler, D. D.
Secretary—Gen. Anson G. McCook.
Chief Clerk.—Charles W. Johnson.
Sergeant-at-Arms—William P. Canaday.
Executive Clerk.—James R. Young.
Senators, at \$5000 each and mileage (figures

following each name show when his expires):

expires):
Alabama.—John T. Morgan, D., term expires 1899; James L. Pugh, 1891.
Arransas.—James H. Berry, D., 1889; James K. Jones, D., 1891.
California.—Leland Stanford, R., 1891; George Hearst, D., 1898.
Colorado.—Thomas M. Bowen, R., 1889; Henry M. Teller, R., 1891.
Connecticut.—O. H. Platt, R., 1891; Joseph R. Hawley, R., 1898.
Deliaware.—Eli Saulsbury, D., 1889; George Gray, D., 1893

Gray, D., 1893.

FLORIDA.—Wilkinson Call, D., 1891; Samuel Pasco, D., 1893.

GEORGIA. — Alfred H. Colquitt, D., 1889; Joseph E. Brown, D., 1891. LLINOIS. — Shelby M. Cullom, R., 1889; Charles B. Farwell, R., 1891. INDIANA. — Daniel W. Voorhees, D., 1891;

David Turpie, D. 1893. Iowa.—James F. Wilson, R., 1889; Wm. B.

Iowa.—James F. Wilson, R., 1889; Wm. B. Allison, R., 1891.

Kansas.—P. B. Plumb, R., 1889; John J. Ingalls, R, 1891.

Kentucky.—James B. Beck, D., 1889; J.C. S. Blackburn, D., 1991.

LOUISIANA.—R. L. Gibson, D., 1889; James B. Eustis, D., 1891.

Maine.—William P. Frye, R., 1889; Eugene Hale R 1893. Hale, R., 1893.

MARYLAND.—E. Gorman, D., 1893 E. K. Wilson, D., 1891; A. P.

MASSACHUSETTS.—George F. Hoar, R., 1889; Henry L. Dawes, R., 1893. Michigan.—Thomas W. Palmer, R., 1899; F. B. Stockbridge, R., 1893. Minnescota.—C. K. Davis, R., 1893; Dwight

M. Sabin, R., 1889. Mississippi – E. C. Walthall, D., 1889; J. Z.

George, D., 1893. Missouri.—George G. Vest, D., 1891; F. M. Cockrell, D., 1893.

NEBRASKA.—Charles F. Manderson, R., 1889; A. S. Paddock, R., 1898. Nevada.—John P. Jones, R., 1891; W. M.

Stewart, R., 1893. New Hampshire.—William E. Chandler, R.,

NEW HAMPSHIRE.—William E. Chandler, R., 1889; Henry W. Blair, R., 1891.
NEW JERSEY — John R. McPherson, D., 1889; Rufus Blodgett, D., 1893.
NEW YORK.—William M. Evarts, R., 1891; Frank Hiscock, R., 1893.
NORTH CAROLINA.—M. W. Ransom, D., 1889; Zebulon B. Vance, D., 1891.
OHIO.—Henry B. Payne, D., 1891; John Sherman, R., 1893.

RHODE ISLAND.—Jonathan Chace, R., 1889:

Nelson W. Aldrich, R., 1893. SOUTH CAROLINA — M. C. Butler, D., 1891; Wade Hampton, D., 1899. TENNESSEE — Isham G. Harris, D., 1899;

William B. Bate, D., 1893. Texas -Richard Coke, D., 1889; John H.

Reagan, D., 1893. VERMONT -Justin S. Morrill, R., 1891, George

F. Edmunds, R., 1893. Virginia.—H. H. Riddleberger, L., 1889; John

W. Daniel, D., 1893.
WEST VIRGINIA.—John E. Kenna, D., 1889;
Charles J Faulkner, D., 1893.
Wiscosin.—John C. Spooner, R., 1891;

Philetus Sawyer, R., 1898.

Recapitulation.—Democrats, 87; Republicans, 38; Independent, 1.

HOUSE OF REPRESENTATIVES - FIFTIETH AND FIFTY-FIRST CONGRESSES.

The Fiftieth Congress expires March 4, Names on the left of the columns below 1889. are of present members; those on the right, of members-elect of the next Congress. Salary members-elect of the next Congress, Salary of members, \$5000 each, and mileage; of the Speaker, \$8000.

Speaker (50th Cong.)-John G. Carliele, of Kentucky

Clerk-John B. CLARK. Chief Clerk-T. O. FOWLES. Sergeant-at-Arms-John P. LEEDOM.

Alabama Richard H. Clarke, D. J. T. Jones, D. M. A. Herbert, D.
W. C. Oates, D.
A. C. Davidson, D.
J. E. Cobb, D.
J. H. Bankhead, D.
W. H. Forney, D. Hilary A. Herbert, D. William C. Oates, D. Lewis W. Turpin, D. James E. Cobb. D. John H. Bankhead, D. William H. Forney, D. Joseph Wheeler, D. Joseph Wheeler, D.

Arkansas. Poindexter Dunn, D. W. H. Cate, D. C. R. Breckinridge, D. T. C. McRae, D. J. H. Rogers, D. S. W. Peel, D.

California. ornia.
John J. DeHaven, R.
Martin Biggs, D.
Joseph McKenna, R.
W. W. Morrow, R.
T. G. Phelps, R.
Wm. Vandever, R. T. L. Thompson, D. Marion Biggs, D. Joseph McKenna, R. W. W. Morrow, R. C. N. Felton, R. Wm. Vandever, R.

Colorado. George G. Symes, R. Hosea Townsend, R. Connecticut.

George Symonds, R. W. F. Wilcox, D. J. Vance, D. C. French, D. C. A. Russell, R. M. T. Granger, D. Chas. A. Russell, R. Frederick Miles, R.

Delaware. J. B. Pennington, D. J. B. Pennington, D.

Florida. R. H. M. Davidson, D. R. H. M. Davidson, D. Chas. Dougherty, D. Robert Bullock, D.

Georgia.
Rufus D. Lester, D.
Henry G. Turner, D.
Chas. F. Crisp, D.
Thos, W. Grimes, D.
John D. Stewart, D.
Jas. H. Blount, D.
Judson C. Clements, D.
Henry H. Carleton, D.
Allen D. Candler, D.
Geo, F. Barnes, D. T. M. Norwood, D. H. G. Turner, D. C. F. Crisp, D. T. W. Grimes, D. J. D. Stewart, D. J. H. Blount, D. J. C. Clements, D H. H. Carleton, D.

A. D. Candler, D.
G. T. Barnes, D.

Illinois. R. W. Dunham, R. F. Lawler, D. E. Mason, R.

Abner Taylor, R. Frank Lawler, D. Wm. E. Mason, R. G. E. Adams, R. A. J. Hopkins, R. R. R. Hitt, R. T. J. Henderson, R. R. Plumb, R. L. E. Payson, R. P. S. Post, R. W. H. Gest. R. G. A. Anderson, D. W. M. Springer, D. J. H. Rowell, R. J. G. Cannon, R. S. Z. Landes, D. Edward Lane, D. Jehu Baker, R. R. W. Townshend, D. John R. Thomas, R.

A. P. Hovey, R. J. H. O'Neall, D. J. G. Howard, D. W. S. Holman, D. C. C. Matson, D. C. C. Matson, D.
T. M. Browne, R.
W. D. Bynum, D.
J. T. Johnston, R.
J. B. Cheadle, R.
W. D. Owen, R.
G. W. Steele, R.
J. B. White, R.
B. F. Shively, D.

J. H. Gear, R. W. I. Hayes, D. D. B. Henderson, R. W. E. Fuller, R. Daniel Kerr, R. J. B. Weaver, D. E. H. Conger, R. A. R. Anderson, I Joseph Lyman, R. A. J. Holmes, R. L.S. Struble, R.

E. N. Morrill, R. E. H. Funston, R. B. W. Perkins, R. Thomas Ryan, R. J. A. Anderson, R. E. J. Turner, R. S. R. Peters, R.

W. J. Stone, D.
Polk Laffoon, D.
W. G. Hunter, R.
A. B. Montgomery, D.
A. G. Caruth, D.
J. G. Carlisle, D.
W. C. P. Breckinridge, W. C. P. Breckinridge,

J. B. McCreary, D. G. M. Thomas, R. W. P. Taulbee, D. H. F. Finley, R.

T. S. Wilkinson, D. M. D. Lagan, D. E. J. Gay, D. N. C. Blanchard, D. C. Newton, D. S. M. Robertson, D.

T. B. Reed, R. N. Dingley, Jr., R. S. L. Milliken, R. C. A. Boutelle, R.

C. H. Gibson, D. F. T. Shaw, D. H. W. Rusk, D. Isidor Rayner, D. Geo. E. Adams, R. Albert J. Hopkins, R. Robt. R. Hitt, R. T. J. Henderson, R. Chas. A. Hill, R. Lewis E. Payson, R. P. S. Post, R. Wm. H. Gest, R. Scott Wike, D. Wm. M. Springer, D. J. H. Rowell, R. Jos. G. Cannon, R. Geo. W. Fithian, D. Edward Lane, D. Jehu Baker, R. R. W. Townsend, D. Geo. W. Smith, R.

Indiana William F. Parrett, D. John H. O'Neal, D. Jason B. Brown, D. William B. Hohman, D. George W. Cooper, D. Thomas M. Browne, R. Wm. D. Bynum, D. E. V. Brookshire, D. Jos. B. Cheadle, R. William D. Owen, R. A. N. Martin, D. C. A. O. McClellan, D. Benj. F. Shively, D.

Iowa John H. Gear, R. Walter I. Hayes, D. D. B. Henderson, R. J. H. Sweeney, R. Daniel Kerr, R. John F. Lacey, R. Edwin H. Conger, R. Jas. P. Flick, R. J. R. Reed, R. Jonathan P. Dolliver,R. Isaac S. Strubble, R.

Kansas. Edmund N. Morrill, R. Edward H. Funston, R. Bishop W. Perkins, R. Thomas Ryan, R. John A. Anderson, R. Erastus J. Turner, R. Samuel R. Peters, R. Kentucky.

D.

Jas B. McCreary, D. Thos. H. Poynter, D. B. F. Day, D. Frank Finley, R. Louisiana.

Theo S. Wilkinson, D. H. Dudley, Colman, R. Edward J. Gay, D. N. C. Blanchard, D. Chos, J. Bootson, D. Chas. J. Boatner, D. S. M. Robertson, D. Maine.

Thos. B. Reed, R. Nelson Dingley, Jr., R. Seth L. Milliken, R. C. A. Boutelle, R.

Maryland. Charles H. Gibson, D. Herman Stump, D. Harry W. Rusk, D. H. Stockbridge, R.

Barnes Compton, D. Louis E. McComas, R. Barnes Compton, D. L. E. McComas, R. Massachusetts. R. T. Davis, R. Chas. S. Randall, R.

Chas, S. Randall, R. Elijah A. Morse, R. Alanson W. Beard, R. Joseph H. O'Neil, D. Nathaniel P. Banks, R. Henry Cabot Lodge, R. Wm. Cogswell, R. Fred. T. Greenhalge, R. Edward Burnet, D. Loseph H. Walker, P. J. D. Long, R. L. Morse, D. P. A. Collins, D. E. D. Hayden, R. H. C. Lodge, R. Wm. Cogswell, R. C. H. Allen, R. E. Burnett, D. Joseph H. Walker, R. Rodney Wallace, R. F. W. Rockwell, R. John E. Russell, D. Wm. Whiting, R. F. W. Rockwell, R.

Michigan.

John L. Chipman, D.

Edward P. Allen, R.

James O'Donnell, R.

Julius C. Burrows, R.

E Baltran, R. J. L. Chipman, D. E. P. Allen, R. J. O'Donnell, R J. C. Burrows, R. Junius C. Burrows, R. C. E. Belknap, R. Mark S. Brewer, R. J. R. Whiting, D. A. T. Bliss, R. B. M. Cutcheon, R. F. W. Wheeler, R. S. M. Stephenson, R. M. H. Ford, D.
Mark S. Brewer, R.
J. R. Whiting, D.
T. E. Tarsney, D.
B. M. Cutcheon, R. S. O. Fisher, D. H. W. Seymour, R.

Minnesota. Thomas Wilson, D. Mark H. Dunnell, R. John Lind, R. John Lind, R. Darius S. Hall, R. J L Macdonald, D. S. S. Snyder, R. Sol. G. Comstock, R. Edmund Rice, D. K. Nelson, R. Mississippi.

J. M. Allen, D. J. B. Morgan, D. T. C. Catchings, D. John M. Allen, D. James B. Morgan, D. Thos. C. Catchings, D. Clark Lewis, D. F. G. Barry, D. C. L. Anderson, D. T. R. Stockdale, D. C. E. Hooker, D. C. L. Anderson, D Thos. R. Stockdale, D. Charles E. Hooker, D.

Missouri. W. H. Hatch, D. C. H. Mansur, D. A. M. Dockery, D. J. N. Burnes, D. Wm. Warner, R. J. T. Heard, D. Wm. H. Hatch, D. Charles H. Mansur, D. Alex. M. Dockery, D. James N. Burnes, D.
John C. Tarsney, D.
John T. Heard, D.
R. H. Norton, D.
F. G. Niedringhaus, R. J. E. Hutton, D. J. J. O'Neil, D. J. M. Glover, D. M. L. Clardy, D. R. P. Bland, D. N. Frank. R. W. M. Kinsey, R. Richard P. Bland, D. W. J. Stone, D. W. H. Wade, R. James P. Walker, R. Wm. J. Stone, D. Wm. H. Wade, R. James P. Walker, D.

Nebraska J. A. McShane, D. James Laird, R. W. J. Cornell, R. James Laird, R. G. W. E. Dorsey, R. Geo. W. E. Dorsey, R. Nevada.

H. F. Bartine, R. W. Woodburn, R.

New Hampshire.

by, D. Alonzo Nute, R.

r, R. Orren C. Moore, R. L. F. McKinney, D. J. H. Gallinger, R.

New Jersey. Chris. A. Berger, R. George Hires, R. James Buchanan, R.
John Kean, Jr., R.
J. W. Pidock, D.
W. W. Phelps, R.
H. Lehlbach, R. James Buchanan, R. J. A. Geissenhainer, D. Samuel Fowler, D. Chas, D. Beckwith, R. Herman Lehlbach, R. Wm. McAdoo, D. William McAdoo, D.

New York. York.
James W. Covert, D.
Felix Campbell, D.
Wm. C. Wallace, R.
John M. Clancy, D.
Thos. F. Magner, D.
F. T. Fitzgerald, T. D.
E. J. Dunphy, T. D. [Vacant.] Felix Campbell, D. S. V. White, R. P. P. Mahoney, D. A. M. Bliss, D. A. J. Commings, D. L. S. Bryce, D.

T. J. Campbell, D. S. S. Cox, D. F. B. Spinola, D. T. A. Merriman, D. W. B. Cochran, D. A. P. Fitch, R. W. G Stahlnecker, D. Henry Bacon, D. J. H. Ketcham, R. S. T. Hopkins, R E. W. Greenman, D. Charles Tracey, D. George West, R. John H. Moffitt, R. A. X. Parker, R. James S. Sherman, R. David Wilber, R. James J. Belden, R. Milton DeLano, R. N. W. Nutting, D. T. S. Flood, R. Ira Davenport, R. C. S. Baker, R J. G. Sawyer, R. J. M. Farquhar, R. J. B. Weber, R. W. G. Laidlaw, R.

E. Latham, D. F M. Simmons, D. C. W. McClammy, D. John Nichols, I. John M. Brower, R. A. Rowland, D. J. S. Henderson, D. W. H. H. Cowles, D. T. D. Johnston, D.

B. Butterworth, R. B. Butterworth, R.
C. E. Brown, R.
E. S. Williams, R.
S. S. Yoder, D.
M. M. Boothman, R.
G. E. Seney, D.
J. E. Campbell, D.
R. P. Kennedy, R.
W. C. Cooper, R.
Jacob Romeis, R. Jacob komeis, r.
A. C. Thompson.
J. J. Pugsley, R.
J. H. Outhwaite, D.
C. P. Wickham, R.
C. H. Grosvenor, R.
Beriah Wilkins, D. Berian Wilkins, D.
J. D. Taylor, R.
W. McKinley, Jr., R
E. B. Taylor, R.
G. W. Crouse, R.
Martin A. Foran, D.

regon. Binger Hermann, R. Binger Hermann, R.

E. S. Osborne, R. H. H. Bingham, R. C. O'Neill, R. J Randall, D M. D. Kelley, R. A. C. Harmer, R. S. Darlington, R. R. M. Yardley, R. D. S. Ermentrout, I John A. Hiestand, R. W. H. Sowden, D. C. R. Buckalew, D. John Lynch, D C. N. Brumm, R Franklin Bound, R. F. C. Bunnell, R. H. C. McCormick, R. E. Scull, R. L. E. Atkinson, R. Maish, D. John Patton, R.

J. H. McCarthy, T. D. Samuel S. Cox, T. D. F. B. Spinola, T. D. John Quinn, D. R. P. Flower, D. Ashbell P. Fitch, D. W. G. Stahlnecker, D. M. D. Stivers, R.
John H. Ketcham, R.
Chas. J. Knapp, R.
J. A. Quackenbush, R. Charles Tracey, D. John Sanford, R. John Sanrord, R.
John H. Moffitt, R.
Frederick Lansing, R.
Jas. S. Sherman, R.
David Wilber, R.
Jas. J. Belden, R.
Milton DeLano, R.
M. W. Nutting, R. N. W. Nutting, R. Thomas S. Flood, R. Thomas S. Flood, R. John Raines, R. Charles S. Baker, R. John G. Sawyer, R. John M. Farquhar, R. J. M. Wiley, D. Wm. G. Laidlaw, R.

North Carolina. T. M. Skinner, D. H. P. Cheatham, R. C. W. McClammy, D. B. H. Bunn, D. J. M. Brower, R. Alfred Rowland, D. J. S. Henderson, D. Wm. H. H. Cowles, D. H. G. Ewart, R. Ohio.

John A. Caldwell, R. Elihu S. Williams, R. Samuel S. Yoder, D. George E. Seney, D. George E. Seney, D.
G. M. Saltzgabar, D.
Henry L. Morey, R.
Robert P. Kennedy, R.
Wm. C. Cooper, R.
Wm. E. Haynes, D.
A. C. Thompson, R.
Jacob J. Pugsley, R.
Jos. H. Outhwaite, D.
Chas. P. Wickham, E.
Chas. H. Grosvenor, R.
James W. Owens, D.
Joseph D. Taylor, R.
Wm. McKinley, Jr., R.
Ezra B. Taylor, R.
Martin L. Smyser, R.
Theo. E. Burton, R.

Pennsylvania.

Henry H. Bingham, R.
R. Chas. O'Neil, R.
Samuel J. Randall, D.
Wm. D. Kelley, R.
Alfred C. Harmer, R. S. Darlington, R. R. M. Yardley, R. Wm. Mutchler, D. D. B. Brunner, D. Marriott Brosius, R. J. A. Scranton, R. E. S. Osborne, R. James P. Railly, D.
John W. Rife, R.
Myron B. Wright, R.
H. C. McCormick, R.
Chas, R. Buckalew, D.
Louis E. Atkinson, R. Levi Marsh, D. Edward Scull, R. S. A. Craig, R.

W. McCullogh, R. John Dalzell, R. T. M. Bayne, R. O. L. Jackson, R. J. T. Maffett, R. Norman Hall, D. W. L. Scott, D.

H. J. Spooner, R. Warren O. Arnold, R.

Samuel Dibble, D. G. D. Tillman, D. J. S. Cothran, D. W. H. Perry, D. J. J. Hemphill, D. G. W. Dargan, D. Wm. Elliott, D.

R. R. Butler, R. L. C. Houk, R. J. R. Neal, D. B. McMillin, D. J. D. Richardson. D.
J. E. Washington, D.
W. C. Whitthorne, D.
B. A. Enloe, D.
P. T. Glass, D. James Phelan, D.

C. Stewart, D. Wm. H. Martin, D. C. B. Kilgore, D. D. B. Culberson, D. Silas Hare, D. J. Abbott, D. W. H. Crain, D. L. W. Moore, D. R. Q. Mills, D. J. D. Sayers, D. S. W. T. Lanham, D.

J. W. Stewart, R. W. W. Grout, R.

T. H. B. Browne, R. G. E. Bowden, R. G. D. Wise, D. W. E. Gaines, R. W. H. F. Lee, D.
H. L. Bowen, R.
W. H. F. Lee, D.
H. L. Bowen, R.
Jacob Yost, R.

N. Goff, Jr., R. W. L. Wilson, D. C. P. Snyder, D. C. E. Hogg, D.

L. B. Caswell, R. Richard Guenther, R. R. M. LaFollette, R. Henry Smith, L. Henry Smith, L. T. R. Hudd, D. C. B. Clark, R. O. B. Thomas, R. N. P. Haugen, R. Isaac Stephenson, R.

RECAPITULATION. Senate, 38 Republicans, 37 Democrats, 1 Congress unknown; Independent; House, House, 166 Republic-168 Democrats, 158 Re- ans, 159 Democrats; Re-publicans, 4 Independ- publican majority, 7.

John Dalzell, R. Thos. M. Bayne, R. Jay Warren Ray, R. Chas. C. Townsend, R. W. C. Culbertson, R. Lewis F. Watson, R. James Kerr, D.

Rhode Island. Henry J. Spooner, R. Warren O. Arnold, R. South Carolina

Samuel Dibble, D. Geo. D. Tillman, D. James S. Cothran, D. Wm. H. Perry, D. John J. Hemphill, D. George W. Dargan, D. Wm. Elliott, D. Tennessee. Alfred A. Taylor, R.

L. C. Houk, R. H. Clay Evans, R. Benton McMillan, D. Jas. D. Richardson, D. Jos. E. Washington, D. W. C. Ahithorne, D. Benj. A. Enloe, D. Rice A. Pierce, D. James Phelan, D. Texas.

Charles Stewart, D. Wm. H. Martin, D. C. B. Kilgore, D. D. B. Culberson, D. Silas Hare, D. Jo Abbott, D. Wm. H. Crain, D. L. W. Moore, D. Roger Q. Mills, D. Jos. D. Sayer, D. S. W. T. Lanham, D. Vermont.

John W. Stewart, R. Wm. W. Grout, R. Virginia.

Thos. H. B. Browne, R. Geo. E. Bowden, R. Geo. D. Wise, D. E. C. Venable, D. P. G. Lester, D. Paul C. Edmunds, D. Charles T. O'Ferrall, D. Wm. H. F. Lee, D. J. A. Buchanan, D. H. St. T. Tucker, D.

West Virginia. G. W. Atkinson, R. Wm. L. Wilson, D. John D. Anderson, D. J. Monroe Jackson, D. Wisconsin.

Lucien B. Caswell, R. Charles Barwig, R. R. M. Lafollette, R. L. W. Van Schaick, R. George H. Bricknar, D. Chas. B. Clark, R. Ormsby B. Thomas, R. Nils P. Haugen, R. Myron H. McCord, R.

RECAPITULATION. Senate Fifty-first

Territorial Delegates—Fiftieth Congress. Arizona, Marcus Aurelius Smith, D. Dakota, Oscar S. Gifford, R.

Idaho, Frederick T. Dubols, R. Montana, Joseph K. Toole, D. New Mexico, Antonio Joseph, D. Utah, J. T. Caine (People's ticket. Washington, Charles S. Voorhees, D. Wyoming, Joseph M. Carey, R.

Territorial Delegates—Fifty-first Congress. Arizona, Marcus A. Smith, Tombstone, D. Dakota, George A. Matthews, Brookings, R. Idaho, Fred T. Dubois, Blackfoot, R. Montana, Thomas H. Carter, Helens, R. New Mexico, A. Joseph, Ojo Caliente, D. Utah, John T. Caine, Salt Lake, P. Washington, John B. Allen, Seattle, R. Wyoming, Joseph M. Carey, Cheyenne, R.

#### U. S. MINISTERS ABROAD.

Name.	Ann.
.Bayless W. Han	na. 1885
.Alex. R. Lawton	11887
. John G. Parkhu	rst.1888
.S. S. Carlisle	1887
.Thomas Jarvis.	1885
. Henry C. Hall	1882
.Wm. H. Robert	s1885
.Charles Denby.	1885
. Dabney H. Mau	rv.1885
.H. A. Dinsmore	1886
.R. B. Anderson	1886
.R. M. McLane	1885
G. H. Pendleton	11885
.Edward J. Phel	ps1885
· ·	-
≻Walter Fearn	1885
,	
.ueo. w. merriii	1885
.J. E. W.Thomps	on.1885
.John B. Stallo	1885
	.Thomas Jarvis. .Henry C. Hall .Wm. H. Roberts .Charles Denby. .Dabney H. Mau .H. A. Dinsmore

Japan......R. B. Hubbard .... 1885 Liberia..... Ezekiel F. Smith .. 1885 

Russia.....Lambert Tree.....1885

Sweden and Norway....Rufus Magee.....1888 Switzerland ...... Boyd Winchester. 1887

Siam.....

Spain....

Turkey. Oscar S. Strauss. 1885 Uraguay and Paraguay. John E. Bacon. 1885 Turkey.... \$7500; Sweden and Norway, \$7400; Greece, etc., \$5300; Cuba, \$6000; and Bollvis, Corea, Hayti, Liberia, Persia, Switzerland, Denmark, Para-guay, Portugal, and Siam, \$5000.

Washington was the first-born of the Presidents, 1782; the elder Adams came next, in 1385; Jefferson, 1748; Madison, 1751; Monroe, 1788; the younger Adams and his successor, Jackson, 1767; the elder Harrison, 1773; Van Buren, 1788; Taylor, 1784; Tyler, 1790; Polk, 1795; Fillmore, 1800. All the Presidents since were born in this century, except Buchanau, 1791—Pierce 1804; Johnson, 1808; Lincoln, 1809; Grant and Hayes, 1822; Arthur, 1830; Garfield, 1831; the younger Harrison, 1833; Cleveland, 1837. Until Van Buren, the Presidents were born in the exact order of their succession. Washington was the first-born of the Presi-

# Presidential Elections-Popular and Electoral Vote, 1888 and 1884.

	1888.								1884.				
1.4	2	é l			Ele	et.		ld,	of		Ele	ct.	
STATES.	Harrison, Rep.	Cleveland, Dem.	Fisk, Prohib.	Streeter, Labor.	Bar.	Clev.	Blaine, Rep.	Cleveland, Dem.	Butler, People's	St. John, Prohib.	Clev.	Blaine.	
Alabama Arkansas. California. Colorado Connecticut. Delaware. Florida. Georgia Illinois. Indiana. Iowa Kansas. Kentucky Louisiana. Maryland Massachusetts. Michigan. Misniesota* Mississippi. Mississippi. Missiouri. Nebraska. New Hampshire. New Jersey New York. North Carolina. Ohio. Oregon. Pennsylvania. Rhode Island South Carolina. Controlina. Controlin	57,197 58,752 124,809 51,796 74,584 12,973 26,657 40,453 270,473 285,356 271,598 182,914 155,134 30,181 73,734 99,986 183,892 236,397 135,890 30,096 236,255 108,425 7,238 45,728 144,344 416,054 33,293 526,223 21,969 113,740 139,816 88,390	117,310 85,962 117,729 37,610 74,920 16,614 39,561 100,472 348,272 201,013 179,877 102,733 183,800 84,941 101,185 213,304 99,204 85,476 80,552 5,326 43,338 161,937 265,825 147,902 366,455 265,825 151,977 234,483 165,788 167,788 16	588 614 5,761 2,210 403 4,234 400 403 1,892 21,695 9,881 3,550 6,779 5,552 130 2,690 4,776 8,701 14,926 218 4,924 45 1,585 7,994 3,231 2,787 24,356 1,607 20,756 1,276 5,607 20,756 1,276 5,607 2,787 24,456 1,276	7,090 (2,634 (4,532 (4,532 (4,533 (4,236 (4,533 (4,533 (4,5)(4,53 (4,5)(4,53 (4,5)(4,53 (4,5)(4,5)(4,53 (4,5)(4,5)(4,5)(4,5)(4,53 (4,5)(4,5)(4,5)(4,5)(4,5)(4,5)(4,5)(4,5)	8 3	10 7 	59,591 50,895 102,416 36,290 12,951 28,031 14,603 337,474 238,463 197,089 154,406 118,122 46,347 72,209 85,659 46,347 71,93 43,509 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 92,929 93,93 111,923 43,249 123,440 562,005 125,068 400,082 25,569 400,082 26,569 400,082 27,733 124,078 93,141 123,934 124,078 93,141 129,935 144,978 93,141 129,935 144,978 144,97	93,951 72,927 89,288 27,723 16,964 31,766 94,667 312,355 244,990 177,318 90,132 152,961 62,540 96,23 152,961 162,540 52,140 96,23 152,961 162,540 52,140 96,23 152,961 162,540 52,140 96,23 162,57 163,154 163,154 164,052 388,250 388,250 398,250 123,258 123	873 1,847 2,017 1,958 6 6 1,688 6 1,688 16,341 1,691 3,953 42,243 3,583 42,243 3,583 42,243 3,583 6 16,984 5,179 726 16,992 422 422 423 423 423 424 433 444 433 444 433 444 433 444 433 444 433 444 433 444 434 44	612 2,920 761 2,806 55 72 195 195 12,074 8,028 1,495 3,139 2,160 2,764 10,026 18,403 4,684 4,684 1,571 6,159 25,016 11,069 454 11,069 454 11,069 454 11,069 11,275	10 7 	8 8 3 · · · · · · · · · · · · · · · · ·	
Virginia West Virginia Wisconsin	150,438 77,791 176,553	79,664 155,282	669	1,064 8,552		8	139,356 161,157	145,497 146,459	4,598	138 7,656	6	ii	
Total	5,438,122	5,534,401	249,288	142,931	235	168	4,851,981	4,874,986	175,370	150,368	219	185	

<sup>\*</sup> Estimated.

4.75

# Popular Vote Since 1820, Etc.

The total popular vote for President at the several elections since 1820 was as follows: 1824, 352,062; 1828, 1,156,328; 1832, 1,217.691; 1836, 1,498,205; 1840, 2,410,772; 1844, 2,698,608; 1848, 2,872,806; 1852, 3,142,877; 1856, 4,053,967; 1860, 4,675,853; 1864, 4,024,792; 1868, 5,724,624; 1872, 4,675,853; 1864, 4,024,792; 1869, 9,218,550; 1874, 10,067,610; 1828, 11,305,562.

THE POPULATION per square mile of the different countries is: Belgium, 451; England and Wales, 889, Holland, 291; Italy, 287; Japan, 299; Germany, 193; Switzerland, 175; Ireland, Austro-Hungary, 158; France, 150; Denmark, China, 110; Scotland, 109, Portugel, 108; Spain, 90; Greece, 7.; Sweden and Norway, 21; Turkey, 20; United States, 11; Russia, 10; Mexico, 9; Brazil, 3.

Take away my first letter; take away my second letter; take away all my letters, and lam always the same. The mail-carrier,

FIFTEEN American inventions adopted throughout the civilized world: The cottongin, the planting machine, the mower and reaper, the rotary printing-press, navigation by steam, hot-air engine, the sewing-machine, the Iudia-rubber industry, the machine manufacture of horseshoes, the sand-blast for carving, the gauge-lathe, the grain elevator, artificial ice-making on a large scale, the electric magnet and its practical application, the telephone.

ORANGE COUNTY, N. Y., and Sussex County, N. J., make more applejack in one year than any other two counties in the United States. Last year 1:0,000 gallons were made, and the government got \$100,000 revenue. This year the estimate is 40,000 gallons.

Why is a baby who kisses his mother very similar to another who fights his father? One is partial to his ma, and the other is martial to his pa.

#### Presidents and Vice-Presidents of the United States.

PRESIDENT.	VICE-PRESIDENT	Term of Office.	PRESIDENT.	Vice-President.	Term of Office.
George Washington John Adams Thomas Jefferson Thomas Jefferson James Madison	Thos. Jefferson Aaron Burr George Clinton	1801-1805	Millard Fillmore Franklin Pierce James Buchanan Abraham Lincoln	William R. King J. C. Breck ridge	1857-1861
James Madison James Monroe John Q. Adams	Elbridge Gerry. D. D. Tompkius	1813-181 <b>7</b> 1817-1825 1825-1829	Abraham Lincoln Andrew Johnson Ulysses S. Grant	Andrew Johnson	1865—1m 1865–1869 —3y 11m
	M. Van Buren R. M. Johnson John Tyler	1833-18 <b>37</b> 1837-18 <b>41</b>	Ulysses S. Grant Ruth ford B. Hayes James A. Garfield Chester A. Arthur.	Henry Wilson Wm. A. Wheeler Chest. A. Arthur	1878-187 1877-188 1881-6 in
James K. Polk Zachary Taylor	George M. Dallas	-3y 11m 1845-1849	Grover Cleveland Benjamin Harrison	T. A. Hendricks .	3 y 51 1 1885-18

### The Wealth of our Presidents.

The Presidents of the United States have generally been men of but moderate means, republic. Not one was a millionaire.

Washington had an estate of nearly \$300,000.

John Adams left a moderate fortune.

Jefferson was often strattened for means, and died poor. If Congress had not bought his library at a price (\$25,000) much beyond its value, and other assistance been given him, he would hardly have escaped bankruptcy in his later years.

Madison saved, and was comparatively rich for his time. Mrs. Madison received \$30,000 from the nation for his manuscript papers.

Monroe died in poverty, and was buried at the expense of his relatives.

John Quincy Adams left about \$50,000.

Jackson had little but the valuable estate known as the Hermitage, near Nashyille, Tenn. Van Buren was accounted rich in his day,

being worth nearly \$300,000.

Polk died possessed of about half that sum.

Harrison was poor, and obtained a living with diffi ulty for several years before he was chosen President.

Tyler was a bankrupt when he became President, but saved his means, married a wealthy wife, and died rich.

Taylor left about \$150,000.

Fillmore had a pretty large fortune, and married rich after he left the White House. Pierce saved \$50,000, about half his salary,

while President, but had little else. Buchanan had at least \$200,000.

Lincoln left but \$75,000.

Johnson was reputed worth about \$50,000. Grant became wealthy, but lost his fortune

through others' rascality. Hayes is comfortably well off.

Garfield had a competence. Arthur died in comfortable circumstances.

Cleveland will go out of office, it is thought, with \$250,000.

Harrison has but moderate means.

Other Interesting Facts.

General Grant was the youngest President when inaugurated, at 47 years of age. land was 48 when inaugurated; Garfield, Polk, and Pierce, 49: Fillmore, 50; Arthur and Tyler, 51; Lincoln, 52; Hayes, Taylor, and Van Buren, 55; Washington and Johnson, 57; Jefferson, Madison, J. Q. Adams, and the elder Harrison, 58; Monroe, 59; Buchanan, 60; John Adams and Jackson, 62. General Harrison will be 55 when inaugurated.

In politics Washington and John Adams were called Federalists; Jefferson, Madison, Monroe, and J. Q. Adams, Republicans—a party deemed the father of the Democratic party deemen the father of the Democratic party, to which belonged Jackson, Van Buren, Tyler, Polk, Pierce, and Buchanan, and to which belongs Cleveland. W. H. Harrison, Taylor, and Fillmore were Whigs, and Lin-coln, Johnson, Grant, Garfield, and Arthur were Republicans of the later school, as are

Hayes and Benjamin Harrison.

Of the ex-Presidents only General Hayes is now living. John Adams was the oldest, dying at 91, on the Fourth of July, 1826, the same day on which Jefferson his successor. the third oldest ex-President, died at 83 the third oldest ex-President, died at 83 Mad-ison died at 85, in 1836; J. Q. Adams at 81, in 1848: Van Buren at 80, 1862; Jackson at 78, 1845; Buchanan at 77, 1868; Fillmore at 74, 1874; Monroe at 73, 1831; Tyler at 72, 1862; Harrison at 68, 1841; Washington at 67, 1799, and Johnson at the same age, 1875; Taylor at 66, 1850; Pierve at 65, 1869; Grant at 63, 1885; <sup>7</sup>incoln at 56, 1865, and Arthur at the same, 1; Polk at 54, 1849; and Garfield at 50, 1881.

sting Facts.

The public debt of the United States, in the last year of their Presidential service, was as follows: Washington, \$83,762,172.07; Adams, \$82,976,294.35; Jefferson, \$65,196,317.97; Madison, \$127,334.933.14; Monroe, \$90,369,777.77; J. Q. Adams, \$6,475,048.87; Jackson, \$37,513.05; Van Buren, \$3.57,3348.82; Harrison, \$5,250,875,54; Tyler, \$23,461,632.50; Polik, \$47,044.862.25; Taylor, \$63,061,836.99; Fillmore, \$66,199,341.71; Pierce, \$31,972,537,90; Buchanan, \$64,842.287.85; Lincoln, \$2,680,647,869,74; Johnson, \$2,610,678,551.19; Grant, \$2,099,439,344.99; Hayes, \$1,942,172,295,34; Garfield, \$1,840,598.811.98; Arthur, \$1,405,923.350,18; Cieveland (debt, less cash in treasury, Dec. 1, 1888), \$1,148.489,853.

The fathers of all the Virginia Preidents—Washington, Jefferson, Madison, and Monroe

Washington, Jefferson, Madison, and Monroe
—were planters; and those of Jackson, Van
Buren, Polk, Pierce, Taylor, Fillmore, Lincoln,
Garfield, and Harrison were also farmers.

John Adams was son of a small farmer and shoemaker, while he himself was a lawyer and father of J. Q. Adams. Tyler's father was a politician, Buchanan's, an Irish emigrant, Grant's, a tanner, Johnson's, a petty politician, and Hayes's father was a merchant. Cleveland is the only clergyman's son ever elected President. Arthur was also the son of a minister, but not President elect. The ancestry of Washington, the Adamses, Madison, the Harrisons, Taylor, Fillmore, Pierce, Lincoln, Johnson, Hayes, Garfield, and Cleveland, was English; of Jefferson, Welsh: Monroe and Grant, Scotch; Jackson, Buchanan, and Arthur, Scotch-Irish; and Van Buren, Dutch.

#### Some Curiosities of Our Government.

Several years ago, a compilation of curiosities of government was made for the New York Sun. It is probable that the data for some of them have changed, but the whole is given for what it may be worth in the present situation. It is as follows: It costs \$90,000 a year to light the Capitol

and grounds.

Postal cards cost the Government 54 cents and 4 mills per thousand. Pennsylvania has a larger number of post-offices than any other State.

The Post-office Department uses \$80,000 worth of wrapping twine a year.

There are 419 type-setters, besides appren-

tices, in the Government Printing-office

The Government has sold more than \$200,-000,000 worth of public lands in 80 years.

Last year the Government paid for several copies of "Puck" for use of department offi-

cials.

The Pension Office expends more than \$60,-

000 a year investigating alleged pension frauds.

There are several post-offices in the country at which the annual income of the Postmaster is only \$1.

Last year the Post-office Department used \$11,000 worth of ink for stamping and cancel-

ling letters.

Next to the President of the United States the best-paid federal official is the Clerk of the

Supreme Court. Among the expenditures of the Government last year was an item for "manufacturing medals, \$25,498.23."

California, with less than half the population of Indiana, pays to the Government more money for postal service.

Virginia now has the same number of Congressmen she had in 1790, when there were only 65 members of the House.

Two-fifths of all the newspapers and periodicals sent through the mails by publishers at pound rates are mailed at New York city.

Estimating Congress to be in session 200 days a year, the salaries of Senators and Representatives amount to about \$10,000 a day.

Seven hundred and fifty persons are constantly employed by the two Houses of Congress (while in session) in and about the Capitol.

Prom the five States of New York, Pennsylvania, Illinois, Massachusetts, and Ohio, the Government derives one half of all its postal revenues.

More than one-half of the internal revenue receipts of the Government comes from the four States of Illinois, New York, Ohio, and Kentucky.

The State of Nevada, which has two Senators and one Representative in Congress, has not so large a population by 617 souls as the city of New Haven, Conn.

During the past ten years the Government has expended nearly \$70,000,000 in caring for the Indians. The total number of Indians attached to agencies is only 246,000.

"Five hundred and eighty-nine dollars for wines, liquors, and mineral waters, for use of board of visitors to naval academy," is an item in last year's expenditures of the Government.

Eighty years ago North Carolina had as many Representatives in Congress as New York. North Carolina now has nine, or one less than she had in 1800, while New York has 34.

After having expended more than a hundred millions of dollars upon its buildings in this district, the Government finds itself paying nearly \$6,000 a month for rent for private buildings.

In the fiscal year ended June 30, the Government's disbursements for pensions reache i a sum which exceeds by six millions of dollars. the disbursements for all purposes in the year 1860.

In the last 20 years the Government has paid for interest on the public debt the enormous-sum of \$2,089,000,000, a sum which would de-fray all the expenses of the Government, excepting interest on the public debt, for nearly nine years to come at the present rate of ex-penditures, and for nearly 35 years if expenses could be limited to what they were in 1860.

# Area and Population of the States and Territories.

NAMES.	Land Surf'ce, Sq.mil's	Acreage improv'd.	Popula- tion 1880,
Alabama	51,540	6,375,706	1,262,505
Arizona	112,920	56,071	40,440
Arkansas	53,045	3,595,603	802,525
California	155,980	10,669,698	864,694
Colorado	103,645	616,169	194,327
Connecticut	4,845	1,642,188	622,700
Dakota	147,700	1,150,413	135,177
Delaware	1,960	746,958	146,608
Dist. Columbia	60	12,682	177,624
Florida	54,240	947,640	269,493
Georgia	58,980	8,204,720	1,542,180
idaho	84,290	197,407	32 610
Illinois	56,000	26,115,154	3,077,871
Indiana	85,910	13,933,738	1,978,301
Indian Territory	64,090	*******	
lowa	55,475	19,866,541	1,624,615
Kansas	81,700	10,739,566	996,096
Kentucky	40,000	10,731,683	1,648,690
Louisiana	45,400	2,739,972	939,746
Maine	29,895	3,484 908	648,936
Maryland	9,860	8.342,700	934,943
Massachusetts	8,040	2,128,311	1,783,085
Michigan	57,430	8,296,862	1,636,937
Minnesota	79,205	7,240,693	780,773
Mississippi	46,340	5,216,937	1,131,597
Missouri	68,735	16,745,031	

NAMES.	Land Surf'ce, Sq.ml's.	Acreage improv'd.	
Montana	145,310	262,611	89,159
Nebraska	76,185		452,402
Nevada	109,740	344,423	62,266
New Hampshire.	9,005	2,308.112	346,991
New Jersey	7,455		1,131,116
New Mexico	122,460	237,592	119,565
New York	47,620	17,717,862	5,082,871
North Carolina	48,580	6,481,191	1,399,750
Ohio	40,760	18,081,091	3,198,063
Oregon	94,560	2,198,645	174,768
Pennsylvania	44,985	13,423,007	4.282.891
Rhode Island	1,085	298,486	276,531
South Carolina	30,170	4,132,050	995,877
Tennessee	41,750	8.496,556	1,542,359
Texas	262,290	12,650,314	1,591,749
Utah	82,190	416,105	148,968
Vermont	9,135	3,286,461	332,286
Virginia	40,125	8,510,118	1,512,565
Washington	66,880	484,346	75,118
West Virginia	24,645	3,792,307	618,457
Wisconsin	54,450	9,162,528	
Wyoming	97,575	88,122	
Unorganized ter.	5,740	*******	*******
		F	THE PARTY

Total ...... 2,970,000 284,771,042 50,155,783

# Population of Cities in the United States.

PLACES.	1888.*	1880.	1870.	PLACES,	1888.*	1880.	1870.
Albany	98,000	87,584	76,216	Mobile	40,000	31,295	32,034
Allegheny City	100,000	78,472	53,180	Montgomerv	28,000	16,796	10,58
Allentown		18,071	13,884	Nashville	80,000	43,543	25,86
Altoona	30,000	19,978	10,610	Nashville Newark, N. J	170,000	137,162	105,050
Atlanta	65,000	45,000	21,789	Newburgh, N. Y	25,000	18,076	17,01
Baltimore	450,000	330,000	267,354	New Bedford	37,000	26,926	21,82
Bay City	34,000	20,638	7,064	New Brunswick	20,000	17,186	15,05
Bloomington, Ill	25,377	17,700	14,590	New Haven	83,500	62,861	50,84
Boston	450,000	263,938	250,526	New Orleans	250,000	215,239	191,41
Bridgeport	44,000	29,153		Newton, Mass	21,121	16,994	12,82
Brooklyn	805,000	556,930		New York		1,209,561	
Buffalo	242,000	149,500		Norwich, Ct	25,000	21,145	16,65
Burlington, I	27,000	19,000	14,930	Oakland, Cal	60,000	34,700	10,50
Cambridge, Mass	65,000	52,680	39,634	Omaha	110,000	30,642	16,08
Cambridge, Mass Camden, N. J	65,000	41,757	20,045	Oswego	24,000	21,102	20,91
Charleston	61,000	49,027	48,956	Paterson	75,000		33,57
Chelsea, Mass	28,500	21,780	18,547	Pawtucket, R. L	24,500	19,530	6.61
Chicago	800,000	503,298	298,977	Peoria, Ill	45,000	31,780	22,84
Cincinnati	330,000		216,239	Petersburg, Va	25,000	21.652	18,95
Cleveland	250,000	159,504	92,029	Philadelphia	1,050,000	847,452	
Cleveland Cohoes, N. Y	23,000	19,556		Pittsburgh	200,000	153,883	86,07
Columbus, O	95,000	51,850		Portland, Me	40,000	33,824	31.4
Council Bluffs	35,000	18,400		Portland, Ore	45,000		
Dallas, Tex	46,000	33,486	10,000	Providence	125,000		68,9
Davenport, Ia	30,000	21,812		Quincy, Ill	District of a	27 498	24.0
Dayton, O	60,000	38,751		Reading, Pa	60,000	43,230	
Denver	100,000	85,718	4,759	Richmond	83,000	63,243	
	50,000	22,900			120,000		62.3
Des Moines		115,007		Rochester	40,000		
Detroit.	232,000	12,276		St. Joseph, Mo	60,000		
Dubuque	80,000				450,000		
East Saginaw Elizabeth, N. J	37,000	19,065		St. Louis	160,000		
Elizabeth, N. J	33,000	28,143		St. Paul	28,500		
Elmira, N. Y	30,000	20,646		Salem, Mass			
Erie, Pa Evansville, Ind	40,000	28,346		San Antonio			
Evansville, Ind	48,000	29,366		San Francisco			
Fall River, Mass	7,7111	48,909		Savannah	52,000		
Fort Wayne	40,000	26,048	17,718	Scranton, Pa			
Galveston	227223	22,308		Somerville, Mass			
Gloucester	22,000	19.288		Springfield, Ill			
Grand Rapids	75,000	32,037		Springfield, Mass			
Harrisburg	40,000	30,728		Springfield, O			
Hartford	50,000	42,560	37,180	Syracuse	83,540		
Haverhill, Mass	25,000	18,478		Taunton, Mass			
Hoboken	50.000	30,943		Terre Haute			
Holyoke, Mass,	32,000	24,926	10,733	Toledo	90,000		
Indianapolis	120 000	76,200	48,244	Trenton			
Jackson, Mich	24,500	16,105	-01514	Troy			
Jersey City	171,000	122,207	82,546	Utica Washington	44,700		
Kansas City	175,000	56,764		Washington	180,500		
Kansas City Kingston, N. Y	25,000	18.387		Waterbury, Ct			
Lancaster, Pa	32,000	28,846		West Meriden, Ct	11/12	18,130	
Lawrence, Mass	42,000	39,068	28,921	Wheeling			
Leavenworth, Ks	35,000	18,000		Wilkesbarre			
Lewiston, Me	23,000	19,082		Williamsport, Pa			
Lexington, Ky	30,000	16,684		Wilmington	55,000		
Louisville	200,000		100,763	Worcester	80,000	58,040	41.
Lowell	80,000	59,340	40,928	# The same workfore - t	Collitude	to botto	innt a
Lvnn	50,000	38,376	28,233	*From estimates			
Manchester, N. H	40,000	32,458	23,536	fair" by the Mayor			
Memphis	75,000	35,000	40,026	each city. Where			
Milwaukee	210,000	115,712		flicted, the smaller l	nas been	taken, a	S Inc

# Generals, Sub-Treasuries, Etc.

THE Generals commanding the United States Army have been: George Washington, 1775 to 1783; Henry Knox, 1783-1784; Josiah Harmer, 1788-1791; Arthur St. Clair, 1791-1796; James Wilkinson, 1796-1798; George Washington, 1798-1799; James Wilkinson, 1800 to 1812; Henry Dearborn, 1812-1815; Jacob Brown, 1815-1828; Alexander Macomb, 1898-1841; Winfield Scott, 1841-1861; George B. McClellan, 1861-1892; Henry W. Halleck, 1862-1864; Ulysses S. Grant, 1864-1869; William T. Sherman, 1869-1883; Philip H. Sheridan, 1883-1888; James M. Schofield, 1888-

210,000 223,000

115,712 15.712 71,440 48,323 13,066

Milwaukee ...

Minneapolis . . . .

The sub-treasuries of the United States are at Boston, New York, Philadelphia, Baltimore, St. Louis, Charleston, Cincinnati, and Sau Francisco. The mints are in Philadelphia, New Orleans, San Francisco, Carson City, and Denver. The last is used at present merely as an assay office. There is also an assay office in New York City for testing foreign coin or bullion bought by the Government. The letters, "O," "S," "C," etc. stamped under the eagle on American coin, indicate the place where the nice we we minted. THE sub-treasuries of the United States are the place where the piece was minted.

conservative and safe.

#### Federal and State Seals.

It is not generally known that the Great Seal of the United States was the contribution to the new republic of a titled aristocrat, dwelling in the country from which the colonies had revolted and with which they were still at revolted and war. Soon after the Declaration of Independ-Franklin, Adams, and Jefferson were appointed to prepare a seal, and employed a West Indian named Du Simitiere to furnish designs and to sketch their own devices, of which they each had at least one. Congress neglected their report, however, as it did the negiected their report, however, as it did the reports of two other committees, appointed in 179 and 1782. In the latter year Mr. Adams, being then in London, sent over a simple and appropriate device, suggested by Sir John Prestwich, an English noble but a great friend of the revolted colonies, and an accomplished antiquary. It met with general approval both in Congress and among the people, and was adopted the same year. Divested pretty nearly of heraldic technicalities, its description runs as follows: Thirteen perpendicular runs as follows: Thirteen perpendicular pieces, white and red; a blue field; the escutcheon on the breast of the American eagle displayed, proper (i. e., in its natural color), holding in his right talon an olive-branch and in his left a bundle of thirteen arrows, all proper, and in his beak a scroll, inscribed with proper, and in his beak a scroll, inscribed with the motto, E Pluribus Unum ("one out of many," or one Nation made up of many states). For the crest, over the head of the eagle, which appears above the escutcheon, a golden glory breaking through a cloud, proper, and surrounding thirteen stars forming a con-stellation of white stars on a blue field. On the reverse side, not used, as the device is for stellation of white stars on a blue field. On the reverse side, not used, as the device is for a pendent seal, a pyramid, unfinished. In the zenith an eye in the triangle, surrounded with a glory, proper. Over the eye the words, Annuit Cupitis—"God favors the under-taking," On the base of the pyramid are the numerical Roman letters, MDCCLXXVI, and underneath the motto, Novus Ordo Sectorum, "a new series of ages," denoting that a new order of things had begun in the Western Hemisphere. Hemisphere.

Hemisphere.
The Great Seal of Michigan was the device of Gov. Lewis Cass, who presented it to the Constitutional Convention, sitting in Detroit June 2, 1835, and received the thanks of the Convention "for the handsome State seal presented by him to the forthcoming State." It bears one of the Federal motios above given, E Pluribus Unum, also Tuebor,—"I will defend—and Si magaria americandum. fend,—and Si quæris amænam peninsulam, circumspice,—"If thou seekest a beautiful peninsula, look around." The last was doubtless suggested to the General by the inscription upon the monument of Sir Christopher Wren, in St. Paul's Cathedral, London, of which Sir Christopher was architect,—Si monument, look around."

The following are the matter of the control of the co

a monument, look around. The following are the mottos of the other States and of the Territories:

ALABMA, "Here we rest," name of the State in an Indian dialect, said to have been uttered by the chief of a war-party, fleeing from an enemy, as they paused by a river-side.

AREANAS, Seanant nomit, "The people AREANAS, Regulation of the stablish."

ARKANBAS, Regnant populi, "The people CALIFORNIA, Eureka, "I have found it." COLORADO, Nil sine Numine, "Nothing with-

out God."

Commercior, Qui transtulit, sustinet, "He who transplanted, sustains." DAROTA, "Liberty and Union, now and for-over, one and inseparable,"—the familiar words of Daniel Webster. DELAWARE, "Liberty and Independence."

DISTRICT OF COLUMBIA, Justitia omnibus, "Justice for all."

GEORGIA, "Let us alone."
GEORGIA, "Wisdom, Justice, Moderation."
IDARO, Salve, "Welcome."
ILLINOIS, "State Sovereignty, National Union."

Indiana, none. Iowa, "Our liberty we prize, and our rights we will maintain.''

Kansas, Ad astra per aspera, "To the stars through difficulties." KENTUCKY, "United we stand, divided we fall."

LOUISIANA, "Justice, Union, and Confi-

dence MAINE, Dirigo, "I guide."

MARYLAND, Crescite et multiplicamini, "Increase and multiply."

MASSACHUSETTS, Ense petit placidam sub-libertate quieten, "By the sword she seeks tranquil peace under Liberty." MINNESOTA, L'Etoile du Nord, "The Star of the North."

Mississippi, none.
Missouri, "United we stand, divided we fall"; and, Salus populi suprema lex esto.
"Let the welfare of the people be the highest

Montana, none. NEBRASEA, "Equality before the law." NEVADA, "All for our country." NEVADA,

NEW HAMPSHIRE, none. NEW JERSEY, "Liberty and Prosperity." NEW MEXICO, Crescit eundo, "It grows by

going." NEW YORK, Excelsior, "Higher."

North Carolina, none.

North Carolina, none.

Ohio, none, but "1802," the year of her admission, appears upon the coat of arms,
Oregon, "The Union."

Pennsylvania, "Virtue, Liberty, and Independence.

Pendence, "Hope."
REODE ISLAND, "Hope."
SOUTH CAROLINA, Spes, "Hope"; also, Animis opibusque parati. "Ready to stake life and property," and Dum spiro, spero, "While I breathe, I hope."
TENNESSEE, "Agriculture, Commerce."

Texas, none. UTAH, "Sept. 9, 1850," the only inscription on the seal.

on the seal,

VERMONT, "Freedom and Unity."

VIRGINIA, Sic semper tyrannis, "Thus ever to tyrants,"

WASHINGTON, Al-Ki.

WEST VIRGINIA, Montani semper libert,
"Mountaineers are always freemen."

WISCONSIN, "Forward."

WYOMING, Cedant arma togæ, "Let arms yield to the gown" (the military to the civil nower). power).

In 1775 there were only twenty-seven news-In 1775 there were only twenty-seven newspapers published in the United States. Ten years later, in 1785, there were seven published in the English language in Philadelphia alone, of which one was a daily. The oldest newspaper published in Philadelpha at the time of the Endead Convention was the Pennsylvania paper published in railaderpas at the time of the Federal Convention was the Pennsylvania. Gazette, established by Samuel Keimer in 1728. The second newspaper in point of age was the Pennsylvania Journal, established in 1742 by William Bradford, whose uncle, An-drew Bradford, established the first newspaper in Pennsylvania, the American Weekly Mer-cury, in 1719. Next in age but the first in im-portance was the Pennsylvania Packet, estab-lished by John Dunlap in 1771. In 1784 it be-came a daily, being the first daily newspaper printed on this continent.

#### American Nicknames.

Arkansas, the Bear or "Bar" State; residents sometimes called Toothpicks.

California, the Bear or Golden State; inhab-

itants formerly called Gold Hunters.
Colorado, the Centennial State, because admitted to the Union in 1876; people called

Rovers Connecticut, the Blue Law, Nutmeg, and

Freestone State, also the Land of Steady Hab-

its; Wooden Nutmegs. Delaware, the Diamond State, or the Blue

Hen; Blue Hen's Chickens, or Muskrats.
Florida, the Gulf State, or the Peninsula;

Cowboys, or Fly-up-the-Creeks.

Georgia, the Cracker State; Buzzards, Illinois, the Prairie or Sucker State; Suckers. Indiana, the Hoosier State; Hoosiers. Iowa, the Hawkeye State; Hawkeyes

Kansas, the Garden or Squatter State; Jay-

hawkers.

Kentucky, the Corncracker or Bear State, the Dark and Bloody Ground; Corncrackers. Louisiana, the Creole or Pelican State; Creoles

Maine, the Pine-tree, Lumber, or Border State; Foxes.

Massachusetts, the Bay State; Bay State Boys.

Maryland, Old-line State; Clam Hunters. Michigan, the Peninsular, Wolverine, or Lake

State; Wolverines. Minnesota, the New England of the West; Gophers.

Mississippi, the Bayou or Mud-cat State; Tadpoles or Mud-cats.

Missouri, the Bullion State: Pukes.

New Hampshire, the Granite State; Granite Boys.

New York, the Empire or Excelsior State; Knickerbockers.

North Carolina, the Old North or Turpentine State; Tar-heels and Tuckoes.

Ohio, the Buckeye State; Buckeyes

Pennsylvania, the Keystone State; Bucktails, Pennamites, Leather Heads. Rhode Island, Little Rhody; Gunflints. South Carolina, the Palmetto State; Weasels.

Texas, the Lone Star, from its coat of arms; Beefheads. Vermont, the Green Mountain State; Green

Mountain Boys.

Virginia, the Old Dominion, Mother of Presidents, Mother of States and Statesmen; Bea-

Wisconsin, the Badger State; Badgers. The people of Alabama are sometimes called Lizards; of Dakota, Squatters; Idaho, Fortune Hunters and Cut Throats; Nevada, Sage Hens: New Mexico, Spanish Indians; Oregon, Hard Cases; Tennessee, Whelps; Utah, Polygamists, Yankee designates strictly only residents or

natives of New England. The general name for Canadians is Canack or Canuck; for Nova Scotians, Blue Noses; New Brunswickers, Fish Heads.

Among fanciful names given to American

cities, are the following;
Atlanta, the Gate City of the South. Baltimore, the Monumental City.

Boston, the Classic City, Modern Athens or Athens of America, Hub of the Universe (Dr. Holmes). the City of Notions, Trimountain

City, Literary Emporium.

Brooklyn, the City of Churches.

Buffalo, the Queen of the Lakes, Blizzard

City.
Chicago, the Garden or Prairie City.
Chicago, the Garden or Prairie City.
Queen Cincinnati, the Queen City, Queen City of the West, Porkopolis.

Cleveland, the Forest City.
Denver, the City of the Plains.
Detroit, the City of the Straits.
Duluth, the Zenith City of the Unsalted

Galena, the Crescent City of the Northwest. Hannibal, the Bluff City. Hartford, the Charter-oak or Insurance

City. Indianapolis, the Railroad City. Keokuk. the Gate City.

Leavenworth, the Cottonwood City. Louisville, the Falls City.

LOWEL THE Spindle City, or City of Spindles. Milwaukee, the Cream City, or City of Brick. Montpelier, the Green Mountain City. Nashville, Rock City or the City of Rocks. New Haven, the Elm City or City of Elms. New Orleans the Creaman City.

New Orleans, the Crescent City.

New York, the Empire City, Gotham, Commercial Emporium, Metropolis of America.

Philadelphia, the Quaker City, City of Penn,

City of Brotherly Love. Pittsburg, the Iron or Smoky City.

Portland, the Hill or Forest City.
Providence, Roger Williams's City, Perry
Davis's Pain Killer.

avis's Pain Amer.
Richmond, the Cockade City.
Rochester, the Flower or Flour City.
St. Louis, the Mound City.
St. Paul, the North Star City.
Salt Lake City, the Mormon City.

Savannah, the Garden City, Forest City of the South

Springfield, Ill., the Flower City. Syracuse, the Salt-works City.

San Francisco, the Golden City, Golden Gate. Frisco.

Washington, the City of Magnificent Dis-tances, Federal City.

Kingston, Canada, is called the Limestone

Quarry; Montreal, Itla and Cudhes City; and Quebec, the Gibraltar of America.

#### American Wonders.

The largest deposits of anthracite coal in the world are in Pennsylvania. Our rivers and lakes contain nearly one-half

of all the fresh water on the globe.

The largest lake in the world is Lake Superior, being 460 miles long and 988 feet deep. The largest valley in the world is the Valley of the Mississippi. It contains 500,000 square

miles. The greatest mass of solid iron in the world is the great Iron Mountain in Missouri. It is 350 feet high and two miles in circuit

The greatest cataract in the world is the Falls of Niagara, which plunges over the rocks in two columns to the depth of 170 feet

The greatest natural bridge in the world is the natural bridge over Cedar Creek in Vir-

ginia. It extends across a chasm 80 feet in width and 250 feet in depth.

The largest river in the world is the Missouri,

in the matter of length-4506 miles, counted to the Gulf, as they should be.

The largest suspension bridge in the world is that over the East River, between Brooklyn and New York. The length of the main span is 1505 feet six inches; of the entire bridge. 5989 feet.

The largest cavern in the world is the Mammoth Cave, in Kentucky. It consists of a succession of irregular chambers, some of which are large, situated on different levels. of these are traversed by navigable branches of the subterranean Echo River. Blind fish are found in its waters.

We occupy 1-15th of all land surface.

# Wars of the United States.

WARS.	YEARS.	U. S. TROOPS.
War of the Revolution	1775-83	809,781
Northwestern Indian wars.	1790-95	8,983
War with France	1798-	*4.193
War with Tripoli	1801-05	*8,830
Creek Indian war	1818-14	13,781
War with Great Britain	1812-15	576,623
Seminole Indian war	1817-18	7,911
Black Hawk Indian war	1881-82	6,465
Cherokee disturbance or		•
removal	1886-87	9,494
Creek Indian war	1836-37	18,418
Florida Indian war	1885-48	41,122
Aroostook disturbance	1838-39	1,500
War with Mexico	1846-48	112,230
Apache, Navajo, and Utah		•
war	1849-55	2,561
Seminole Indian war	1856-58	2,687
Civil wart	1861-65	2,772,408

\* Naval forces engaged.

†The number of troops on the Confederate side was about 600,000.

The numbers of troops furnished the Union army by the different States and Territories were as follow: Alabama, 2556; Arkansas, 829; California, 15,725; C.·lorado, 4093; Connecticut, 55,864; Delaware, 12,284; Florida, 1290; Illinois, 259,092; Indiana, 196,363; Icwa, 70,242; Kansas, 20,149; Kentucky, 75,760; Louisiana, 5,224; Maine, 70,107; Maryland.

46,638; Massachusetts, 146,730; Michigan, 87, 364; Minnesota, 24,020; Mississippl, 545; Missouri, 199,111; Nebraska, 3157; Nevada, 1080; New Hampshire. 33,937; New Jersey, 76,814; New York, 448,850; North Carolina, 3156; Ohio, 313,180; Oregon, 1810; Pennsylvania, 337,936; Rhode Island, 23,236; Tennessee, 31,092; Texas, 1933; Vernoni, 32,988; West Virginia, 32,088; Rhode Island, 23,236; Tennessee, 31,092; Texas, 1965; Vermont, 33,288; West Virginia, 32,068; Wisconsin, 91,327; Irakota, 206; District of Columbia, 16,534; Indian Territory, 3530; New Mexico, 6561; Washington Territory, 964; colored troops, 93,441; total, 2,752,408. Georgia, South Carolina, Virginia, Montana, and Utah furnished no soldiers to the Federal army so far as is shown by the records at army, so far as is shown by the records at

Washington. The casualties in the volunteer and regular armies of the United States during the war were reported by the Provost-Marshal Gen-eral in 1866 as follow: Killed in battle, 61,362; died of wounds, 34,727; died of disease, 183,287; total died, 279,376; total deserted, 199,105, Number of soldiers in the Confederate service who died of wounds or disease (partial state-ment), 133,241. Descrited (partial statement), 104,428. Number of United States (table) tured during the war, 212,608; Confederate troops captured, 476,169. Number of United States troops paroled on the field. 16,431; Confederate troops paroled on the field, 248,599, Number of United States troops who died while prisoners, 29,725; Confederate troops who died while prisoners, 26,774.

#### Decisive Battles of the World.

"There are some battles which claim our attention, independently of the moral worth of the combatants, on account of their enduring importance and by reason of their practi cal influence on our own social and political condition, which we can trace up to the results of those engagements. They have for us an actual and abiding interest, both while we investigate the chain of causes and effects, by which they have helped to make us what we are, and also while we speculate on what we probably should have been, if any one of those battles had come to a different termina-tion." These are the words of Professor Cressy, of University College, Oxford, in his book on "Fifteen Decisive Battles of the World, from Marathon to Waterloo," pub-lished in 1852. In his judgment the memora-ble fifteen are as follow:

490 B. C .- Battle of Marathon.

413—Defeat of the Athenians at Syracuse.

331—Battle of Arbela.

207—Battle of the Metaurus.

9 A. D.—Defeat of the Romans under Varus.

451—Battle of Chalons. 732—Battle of Tours. 1066—Battle of Hastings.

1429-Joan of Arc's victory at Orleans. 1588—Defeat of the Spanish Armada.

1704—Battle of Blenheim. 1709—Battle of Pultowa. 1777—Defeat of Burgoyne at Saratoga. 1792—Battle of Valmy. 1815—Battle of Waterloo.

To which the following have been added by

competent authorities:

1631—Battle of Breitenfeld (or Leipsic), which turned the tide of the Thirty Years' War, and saved Protestantism to Germany. It is an in-teresting coincidence that Sept. 17, the day of this battle, is also the day of Antietam (1862) in our late civil war, when Lee was turned back from his contemplated invasion. of the North.

1768-Battle on the Plains of Abraham, near Quebec, which virtually terminated the occu-pancy of the French in America. 1863—The battle of Gettysburg, July 13.

### The Continental Army.

The army of the Revolution was made up of one battalion and three companies of artillery: three legions, three regiments, and one troop of cavalry; and infantry as follow: Three regiments and two companies from New Hampshire, fifteen regiments from Massi-chusetts, two from Rhode Island, eight from Connecticut, five from New York, eleven and three companies from Pennsylvania, one regiment from Delaware, seven from Maryland, elsven from Virginia, three from North Carolina, one from South Carolina, two (so-called) Canada regiments, one German regiment, one independent corps, "Warner's" regiment, four regiments made up of some consolidated regiments, one battalion of odds and ends, and one invalid regiment, 91 organizations in all. The engineer corps was officered almost entirely by fereigners. Kosciusko was appointed

Colonel of Engineers in 1776. In 1784 the army was re-organized, with Gen. Knox as Major-General, Baron De Steuben. Inspector-General, with rank of Major-General, Timothy Pickering. Quartermaster-General, Timothy Pickering. Quartermaster-General, with rank of Colonel, John Pierce. Paymaster-General, and Samuel Hodgden, Commissary of Military Stores. Only two regiments of Infantry were organized at this time, one the First American Regiment, made up of Massachusetts and New Hampshire troops, and the other the First Hampshire troops, and the other the First United States Infantry, now the Third In-fantry. No increase in the army was made until 1809, when Gen. Wilkinson came to the head; there were then one regiment of artil-lerists, one of light artillery, one of light dragoons, seven of infantry, and one of rifemen.

# Secret Societies in this Country.

There are now between two and three hundred secret societies of all kinds in this country, including only those whose members take a solemn oath or obligation and maintain secret sessions. The membership in this country of the principal organizations of this kind was reported a few months ago by the the author of "The Cyclopædia of Secret Societies," Mr. Wm. M. Butler, of Rochester, N. Y., to be as follows: Free and Accepted Masons, 600,000; Independent Order of Odd Fellows, 530,300; Knights of Labor, 500,000; Grand Army of the Republic, 380,000; Knights of Pythias, 210,000; Independent Order of Good Templars, 200,902; Ancient Order of United Workmen, 191,876; Knights of Honor, 124,756; the Royal Arcanum, 80,000; Improved

Order of Red Men, 64,000; American Legion of Honor, 61,634; Knights and Ladies of Honor, 49,200; Sons of Veterans, 47,000; Ancient Order of Foresters, 38,539; Daughters of Rebekah, 33,958; Knights of the Golden Eagle, 30,000; Order of Chosen Friends, 29,271; Independent Order of B'nai Brith, 24,496; Order of United Friends, 20,000; Ancient Order of United Friends, 20,000; Ancient Order of United Order of the Golden Cross, 11,000; United Order of the Golden Cross, 11,000; Enewolent Protective Order of Elks, 6,500. The total membership of Free Masons throughout the world was reported at three to five millions, of Good Templars, 483,103, and of the Druids, 67,000. The figures of the Daughters of Rebekah do not include about 40,000 Odd Fellows (men) who have taken this degree.

#### The Schools, the Saloons, and the Voters.

The New York Voice has made a comparative tabular view of the expenditure per capita of population for the schools and saloons in twenty-two of the States, which furnishes an instructive lesson—rather twenty-two lessons. It is as follows:

STATES.	SCHOOLS.	SALOONS
Alabama	\$ .55	\$ 2.74
Arkansas	.92	2.56
Georgia	.42	4.89
Kentucky	.39	7 64
Louisiana		18.09
Mississippi	.67	3 48
North Carolina	.44	4.88
South Carolina	.39	3.06
Tennessee	.61	4.00
Virginia	.87	5.54
California	8.50	40 16
Connecticut	2.67	15.88
Illinois		12.41
Indiana	2 53	10.54
Massachusetts	3.68	14.74
Michigan	2.26	11.41
Minnesota		13 03
New Jersey		21.47
New York	2,49	22.78
Ohio	2.78	17.81
Pennsylvania	2.12	14.78
Wisconsin		14 47

In 1880, it was shown by the census returns and the internal revenue reports that the ratio of saloons to voters, in all the States east of the Mississippi, was one to 107.7; in the States and Territories between the Mississippi and the Rocky Mountains, one to 112.5; but in the eleven mountain States and Territories, the astounding ratio of one to 43. That is just the figure for Wyoming; naughty Utah had but one in 84; Washington, one in 88; Oregon, one in 58; California and Colorado, one in 37; Idaho, one in 35; Nevada, one in 32; Montana, one in 28; New Mexico, one in 26; and Arizona, one in 25. Dakota had but one in 95; Nebraska, one in 183; Texas, one in 183; and Kansas, one in 244. These ratios must have greatly improved since then, at least in some cases.

The Tenth of last census enumerates 36,761,-670 persons of ten years of age and upwards. Of this number 4,923,451, or 13.4 per cent., are returned as unable to read, and 6,239,958, or 17 per cent., as unable to write: The following States show over 40 per cent. of their population as unable to write: Alabama, 60; Florida, 43; Georgia, 50; Louisiana, 49; Mississippi, 50; New Mexico, 65; North Carolina, 48; Sonth Carolina, 55, and Virginia, 41; and the following States with less than 5 per cent. unable to

read: Connecticut, 4; Dakota, 3; Illinois, 4; Indiana, 5; Iowa, 2; Kansas. 4; Maine, 4; Michigau, 4; Minnesota, 4; Montana, 5; Nebraska, 2½; New Hampshire, 4; New Jersey, 5; New York, 4; Ohio, 4; Oregon, 4; Pennsylvania, 5; Utah, 5; Virginia, 5, and Wisconsin, 4.

Comparative statements for the countries of the world almost always make a favorable showing for the United States. For example:

COUNTRIES.	POPULATION.	TAXATION PER HEAD.
Great Britain	35,241,482	\$12 10
France	87,672,048	18 00
Germany	45,234,091	3 65
Belgium	5,784,958	10 75
Italy	28,459,628	10 78
Russia	82,930,861	23 50
Spain	16,958,178	10 00
Canada	4,324,810	34 80
New Zealand	489,933	36 90
Victoria	973,403	30 00
New South Wales	821,268	41 00
United States,	58 420,000	5 76

THE NATIONALITY or nativity of the foreignborn inhabitants of the United States, according to the census of 1880, was as follows: Germany, 1,986,742; Ireland, 1,854,571; British America, 717,084; England, 622,676; Sweden, 194,387; Norway, 181,729; Scotland, 170,136; France, 106,371; China, 104,467; Switzerland, 88,621; Bohemia, 85,361; Wales, 83,302; Mexico, 68,399; Denmark, 64,196; Holland, 58,090; Poland, 48,557; Italy, 44,230; Austria, 39,663; Russia, 35,720; Belgium, 15,535; Luxembourg, 12,836; Hungary, 11,526; West Indies, 9,484; Portugal, 8,138; Cuba, 6,917; Spain, 5,121; Australasia, 4,906; South America, 4,566; India, 1,707; Turkey, 1,205; Sandwich Islands, 1,147; Greece, 776; Central America, 707; Japan, 401; Malta, 305; Greenland, 120.

STATISTICS of twenty leading libraries in this country show that of over \$500,000 spent, a little over \$170,000 was devoted to books, while other expenses consumed \$358,000. In the Mercantile Library of New York City it costs 14 cents to circulate a volume; in the Aston. 1446 cents are spent on each volume, or 27 cents on each reader; in Columbia College Library. 2146 per reader; in the Library Company of Philadelphia, 26 cents per volume, or 10 cents per head. The Library of Congress is the largest in this country, as it contained 570,000 volumes in 1886. The Mercantile Library of Philadelphia was the seventh in point of size in this country in the same year. There are in the United States 538 libraries.

# Michigan.

#### The State Government, January 1, 1889.

EXECUTIVE—STATE OFFICERS. Governor, Cyrus G. Luce, Gilead. Salary. \$1000.

Lieutenant-Governor, James H. Macdonald, Escanaba. Paid legislative per diem during

the session. Secretary of State, Gilbert R. Osmun, Detroit. Salary, \$800. State Treasurer, George L. Maltz, Alpena. Salary, \$1000. Auditor General, Henry H. Aplin, West Bay City. Salary, \$2000. Commissioner of the Land Office, Roscoe D. Div Bergiera Springer, Salary, \$200.

Dix, Berrien Springs. Salary, \$800.
Attorney General, Stephen V. R. Trowbridge, Ionia. Salary, \$800.
Superintendent of Public Instruction, Joseph

Estabrook, Olivet. Salary, \$1000.

Regents of the University.—Charles S. Dranegents of the University.—Charles S. Dra-per, East Saginaw, term expires Dec. 31, 1889; Austin Blair, Jackson, 1889; Arthur M. Clark, Lexington, 1891; Charles J. Willett, St. Louis, 1891; Charles R. Whitman, Ypsilanti, 1893; Moses W. Field, Detroit, 1893; Roger W. But-lerfield, Grand Rapids, 1895; Charles Hebard, UAnea, 1896

lerfield, Grand Rapius, 1980, Charles Levens, L'Anne, 1895.

State Board of Education.—Perry F. Powers, Cadillac, term expires Dec. 31, 1894; James M. Ballou, Otsego, 1890; Samuel S. Babcock, Detroit, 1892; Secretary, ex officio, Joseph Estabrook, Olivet. This board has the direction of the State Normal School.

JUDICIARY—SUPREME COURT.

Chief Justice, Thomas R. Sherwood, Kalamazoo, term expires Dec. 31, 1889.

Associate Justices. — John W. Champlin, Associate Justices.— John W. Champlin, Grand Rapids, term expires Dec. 31, 1891; Allen B. Morse, Ionia, 1893; James V. Campbell, Detroit, 1893; Charles D. Long, Flint, 1897. Clerk, Charles C. Hopkins, Lansing; Reporter, William D. Fuller, Newaygo. The salary of each Justice of the Supreme Court is \$500, and of the reporter, \$1500. The clerk receives fees. The court holds four terms annually in Lansing, commencing on the first Tuesday after the first Monday in January, April, June, and October. Champlin,

CIRCUIT JUDGES. 1. Victor H. Lane, Adrian.

2. Thomas O'Hara, Berrien Springs, 3. George Gartner, Henry N. Brevoort, Cor-nelius J. Reilly, George S. Hosmer, all of Detroit.

4. Erastus Peck, Jackson.

4. Erastus Feck, Jackson.
5. Frank A. Hooker, Charlotte.
6. Joseph B. Moore, Lapeer.
7. William Newton, Flint.
8. Vernon H. Smith, Ionia.
9. George M. Buck, Kalamazoo.
10. Chauncey H. Gage, Saginaw.
11. Joseph H. Steere, Sault Ste. Marle,
12. William D. Williams, Marquette.
13. J. G. Ramsdell, Traverse City.
14. Albert Dickerman, Muskergon.

14. Albert Dickerman, Muskegon.
15. Noah P. Loveridge, Coldwater.
16. Arthur L. Canfield, Mt. Clemens.
17. William E. Grove, Grand Rapids.
18. George P. Cobb, Bay City.
19. J. Byron Judkins, Hersey.
20. Daniel J. Arnold, Allegan.
21. Henry Hart, Midland City.
22. Edward D. Kinne, Ann Arbor.
23. William H. Simpson, Au Sable.
24. Watson Beach, Lexington.
25. Claudius B. Grant, Houghton. Albert Dickerman, Muskegon,

33. Claudius B. Grant, Houghton. 36. Robert J. Kelley, Alpena. 37. John H. Palmer, Big Rapids. 38. Fred H. Aldrich, Cadillac.

THE LEGISLATURE — 1889-90.

1st District-Joseph Nagle, D., Detroit. 2d—Theodore Rentz, D., Detroit. 3d—Anthony Grosfield, D., Detroit. 4th—James S. Gorman, D., Chelsea stn—James S. Gorman, D., Chelisea, 5th—Arthur D. Gilmore, R., Blizsfield. 6th—Adelbert R. Chapman, R., Reading. 7th—Alfred Milnes, R., Coldwater. 8th—Peyton Ranney, R., Kalamazoo. 9th—W. Irving Babcock, R., Niles. 10th—James W. McOrmick, R., Fenville. 11th—Philip T. Colgrove, R., Hastings. 12th—John Holbrook R. Lansing. 12th—John Holbrook, R., Lansing, 13th—William Ball, R., Hamburg, 14th—Franklin B. Galbraith, R., Pontiac, 15th—J. E. Barringer, D., Armana.
16th—Robert L. Taylor, R., Lapeer.
17th—Edwin G. Fox, R., Mayville.
18th—Chauncey W. Wisner, D., E. Saginaw.
19th—William Toan, R., Fortland.
20th—Sybrant Wesselius, R., Grand Rapids.
21st—Jacob Den Herder, R., Zeeland.
22d—T. S. Gurney, R., Hart.
23d—Lewis G. Palmer, R., Big Rapids.
24th—E. R. Green, R., Alma. 15th—J. E. Barringer, D., Armada, 2504—Lewis O. Fatiner, R., Lig Alphus, 24th—E. B. Green, R., Alma. 25th—Columbus V. Tyler, D., Bay City, 26th—Andrew Harshaw, D., Alpena, 27th—John G. Berry, R., Vanderbilt, 28th—J. W. Giddings, R., Cadillac, 9th, December 1, 2011, 19 29th—Roswell Leavitt, R., Bellaire.
30th—A. O. Blackwell, R., Gladstone.
31st—C. G. Griffey, R., Negaunee.
32d—Thomas B. Dunstau, R., Hancock.
Republican, 24; Democrat, 8; majority, 18.

HOUSE.

ALLEGAN.-G. M. Baldwin, R., Hopkins Station; S. S. Stout, R., Allegan. ALPENA, MONTMORENCY, OTSEGO.—Edward K. Potter, R., Alpena.

K. Potter, R., Alpena,
BARRY.—Jeremish M. Rogers, R., Hastings,
BAY.—John Briske, D., Bay City; Alexander
Zagelmeyer, R., West Bay City.
BERRIEN.—William A. Baker, R., Coloma;
O. E. Aleshire, D., Buchanan.
BRANCH.—A. A. Van Orthwick, R., Quincy.
CALHOUN.—Frederick F. H. aglin, R., Albion:
Henry C. Hall, R., Battle Creek.
CASS.—Edward R. Spencer, R., Dowagiac.
CHARLEVOIX, ANTRIM, MANITOU.—William.
Harris, R., Norwood.

Harris, R , Norwood.

CHEBOYGAN, EMMET PRESQUE ISLE.—Philip B. Wachtel, D., Petoskey. CHIPPEWA, ALGER, LUCE, MACKINAC, SCHOOL-CRAFT.—Michael Chambers, D., St. Ignace.

CLINTON.—Cyrus Sherman, R., Ovid. DELTA, IRON.-A. R. Northrup, R., Esca-

EATON.—Walter W. Williams, R., Eaton Rapids; Alden B. Swift, R., Kalamo. GENEREE.—H. R. Dewey, R., Grand Blanc;

J. W. White, R., Clio. Grand Traverse, Kalkaska.—Jacob Tinkle-

GRATIOT—Henry L. Wood, R., St. Louis.
HILLSDALE.—Avery A. Smith, R., Hillsdale;
Lucius E. Russ, R., North Adams.
HOUGHTON.—Harry C. Southworth, R., Han-

HURON.—August Heineman, D., Port Hope. Ingham.—A. F. Ferguson, D., Okemos; C.

INGHAM.—A. F. Ferguson, D., Okemos; C. C. Fitch. D., Mason. Ionna.—H. W. Browne, R., Hubbardston; Willard Hawley, R., Saranac. Iosco, Alcona, Arenac.—Walter R. Dyer R., Standish.

ISABELLA.-Wallace W. Preston, R., Mt.

Jackson.—John W. Watt John E. Tyrrell, R., Jackson. Watts, R., Jackson;

KALAMAZOO. - John J. Lusk, R., Kalamazoo;

John W. Kirby, R., Galesburg.

KENT.—John Killean, D., Frank H. Gill, D.,
Grand Rapids; George E. Judd, R., Cascade;
Neil McMillan, R., Rockford.

LAPEER.—John L. Preston, R., Columbiaville; Thomas C. Taylor, R., Almont.

LEELANAW, BENZIE.—Charles W. Williams,
R. Kasson.

R., Kasson.

LENAWEE. -Minor T. Cole, R., Palmyra; John W. Dalton, R., Adrian; Adrian O. Abbott, R., Hudson, LIVINGSTON.-Solomon L. Bignall, R., Fowl-

erville.

MACOMB.—Lucius H. Canfield, D., New Ha-ven; Harvey Mellen, D., Romeo.

Manister.—William Probert, D., Bear Lake, Marquette.—George Wagner, R., Marquette; Henry Rauthier, R., Ishpeming. Masox.—Daniel Austin, D., Ludington. McCosta.—Frank Morton, R., Lakeview.

MENOMINEE.-Byron S. Waite, R., Menominee.

MIDLAND, CLARE, GLADWIN.-A. D. Salisbury,

R., Midland.

Monnog. - Samuel P. Jackson, D., Monroe; Charles Angerer, R., Scofield.

Montcalm.—Norris J. Brown, R., Stanton;

Henry Watson, R., Greenville, Mcskegon. — William H. McKinstry, D.,

Muskegon; Robert Robinson, R., Trent.
Newaygo.—David Collins, R., Croton.
OARLAND.—James H. Peabody, R., Birming-

ham; David Hobart, R., Holly. OCEANA.—Daniel W. Crosby, R., Elbridge. OGEMAW, CRAWFORD, OSCODA, ROSCOMMON.-Stanley W. Turner, R., Roscommon.

ONTONAGON, BARAGA, ISLE ROYAL, KEWER-NAW, GOGEBIC.—Charles A. Hanscom, R., Ironwood.

OSCEOLA, MISSAUREE.-Willis M. Slosson, R., Reed City.

OTTAWA.—G. J. Diekema, R., Holland; J. V. B. Goodrich, R., Coopersville, SAGINAW.—Fred W. Hollister, D., Saginaw; Rowland Connor, D., East Saginaw; Hiram W. Robinson, D., Bridgeport; John A. Mcchregor, R. Freder

Gregor, R., Freeland.
Sanilac.—George Hinkson, Jr., R., Amadore; Richard D. O'Keefe, R., Carsonville.
Shiawassee.—James B. F. Curtis, R., New
Lohrop; Oliver S. Smith, R., Owosso.
Sr. Cr. Un. Freedrich Lindow D. Marino

ST. CLAIR.-Frederick Lindow, D., Marine City; Joseph Gibbons, D., Blaine. Sr. Joseph.—Russell R. Pealer, R., Three

Rivers.

John A. Damon, R., Millington; TUSCOLA.

Tuscola.—John A. Damon, R., Millington; William McKay, R., East Dayton.
Van Buren.—Charles L. Eaton, R. Mattawan; Milan Wiggins, R., Bloomingdale.
Washtenaw.—John V. N. Gregory, D., Dexter; James L. Lowden, D., Ypsilanti.
Wayne.—W. W. Wheaton. D., James A. Randall, D., Patrick Dee, D., George Huebner, D., Adolph Jasnowski, D., J. P. Murtagh, D., August Wetlaufer, D., Detroit; T. J. Wells, R., Hamtramck; Theodore E. Demming, R., Wayne: H. L. Stoffet, R., Belden. Wayne; H. L. Stoffet, R., Belden. WEXFORD, LAKE.—Sylvanus Alexander, R.,

Wexford.

Republican, 71; Democrat, 29; majority, 42.

#### MILITARY DEPARTMENT.

Cyrus G. Luce, Governor and Commanderin-Chief, Lansing.
Daniel B. Ainger, Brigadier General and Adjutant General, Charlotte.

Frank D. Newberry, Brigadier General and Inspector General, Coldwater,

Sherman B. Daboll, Brigadier General and Quartermaster General, St. Johns.

E. Crotton Fox. Colonel and President State Military Board, Grand Rapids. Fred E. Farnsworth, Colonel and Alde-de-

Camp, Detroit.
Frank D. Newberry, Brigadier General and ex officio Member State Military Board, Cold-

John Northwood, Colonel and Paymaster

John Northwood, Colonel and Paymaster General, New Lothrop.

James N. Cox, Colonel and A. D. C. to the Commander-in-Chief, Calumet.

George M. Devlin, Colonel and A. D. C. to the Commander-in-Chief, Jackson.

George S. Lockwood, Colonel and A. D. C. to the Commander-in-Chief, Saginaw.

Marvin E. Hall, Colonel and A. D. C. to the Commander-in-Chief, Hillsdale.

Willis C. Humphrey, Lieut. Colonel and Ass't Adjutant General, Lansing. La Fayette Harter, Lieut. Colonel and Ass't Quartermaster General, Detroit.
Milo D. Campbell, Major and Military Secre-

tary, Lansing.
Howard Weist, Major and Judge Advocate,

Detroit. FIRST BRIGADE.

Israel C. Smith, Brigadier General Commanding First Brigade, Grand Rapids. Charles W. Calkins, Lieut. Colonel and Ass't

Adjutant General, Grand Rapids,
Joseph C. Herkner, Lieut. Colonel and Ass't
Inspector General, Grand Rapids,
William A. Butler, Jr., Lieut. Colonel and
Ass't Quartermaster General, Detroit.

Hiram R. Mills, Lieut. Colonel and Brigade

Surgeon, Port Huron.
Eugene W. Jones, Captain and Aide-de-Camp, Grand Rapids. Samuel W. Wheeler, Captain and Aide-de-

Samuel W. Wheeler, Captain and Actor.
Camp, Marquette.
FIRST REGIMENT—Field and Staff.
Elmer W. Bowen, Colonel, Adrian.
Martin O'Leary, Lieut. Colonel, Adrian.
John E. Tyrrell, Major, Jackson.
Charles M. Woodward, Surgeon, Tecumseh.
Thomas Sullivan, Ass' Surgeon, Ann Arbor.
Ebenezer Thompson, Chaplain, E. Saginaw.
Fred. Shubel, Jr., First Lieutenant and Adutant. Lansing.

jutant, Lansing.
John W. Barry, First Lieutenant and Regimental Quartermaster, Jackson.

SECOND REGIMENT—Field and Staff. Edwin M. Irish, Colonel, Kalamazoo. William T. McGurrin, Lieut. Colonel, Grand

Rapids.
Charles H. Rose, Major, Grand Rapids. William F. Hake, Surgeon, Grand Rapids. Irwin Simpson, Ass't Surgeon, Kalamazoo. Washington Gardner, Chaplain, Cincinnati. Harry W. Bush, First Lieutenant and Adjutant, Kalamazoo.

tant., Kalamazoo.
THIRD REGIMENT—Field and Staff.
Charles S. Brown, Colonel, Flint.
Charles R. Hawley, Lieut. Colonel, Bay City.
Frank B. Lyon, Major, Calumet.
Arthur Wilkinson, Surgeon, Alpena,
Eugene W. Davis, Assé's Surgeon, Saginaw.
Henry M. Curtis, Chaplain, Flint.
J. Leverett Willett, First Lieutenant and

djutant, Flint. John W. Button, First Lieutenant and Reg-

imental Quartermaster, East Saginaw

Fourth Regiment—Field and Staff.— Eugene Robinson, Colonel, Detroit. Patrick J. Sheahan, Lieut. Colonel, Detroit. George W. Corns, Major, Detroit. James B. Book, Surgeon, Detroit. John E. Clark Assis Surgeon, Detroit.

John E. Clark, Ass't Surgeon, Detroit. Charles E. Locke, First Lieutenant and Adjutant, Detroit.

Frederick W. Brede, First Lieutenant and Regimental Quartermaster, Detroit,

# Presidential Elections in Michigan.—1884, and 1888.

	<u> </u>	188	4.			1888.					
Counties.	Blaine, R.	Cleveland, D	Butler, G.	St. John, P.	Harrison, R.	Cleveland, R.	Fisk, P.	Streeter, Un. Lab.	Totals		
lcona	. 545	329	9	1	645	502	7	6	1.1		
licona liger	4,080	2,810	760	927	284 5,078	162 8,829	10 721	185	9,7		
lpena	927	924	198	59	1 498	1,504	118	44	8,1		
ntrim	1,066	864 17	855 531	87 44	1,305 357	881 261	114 41	462	2,3 1,1		
araga	396	807			389	406	4		7		
rry	2,699	1,150 8,486	1,927 1,534	401 161	3,212 4,878	2,676 5,386	891 121	167 127	6,4 10,0		
ensie	2,916 556	245	185	77	710	412	94	17	1,2		
errien	4,445	4,030 1,315	427 1,644	845 419	5,128 4,098	4,689 2,789	468 503	29 63			
Jhoun	3,671 5,113	4,698	644	564	5,733	4,358	618	159	10,8		
arlevoix aeleoygan nippewa	2,764	2,527 401	223 469	216 56	2,0 <b>29</b> 1,270	2,564 874	282 95	11	5.7 2.2		
leponsum	1,043	577	811	40	1,110	1,237	76	8	2.4		
ippewa	. 686	635 508		21	1,055	909	82	12	2,0		
areinton	622 2,782	2,418	271 814	84 815	905 3,498	912 2,248	57 848	91	1,8 7,1		
avion	804	178	45	9	486	479	9	1	9		
ita	1,201 4,106	609 2,818	911	494	1,587 4,624	1,332 8,266	607	376	1,9 8,8		
		587	810	105	946	1,056	106	. <b></b>	2,1		
neseeadwingebicand Traverse	4,328 288	8,158 208	560 19	1,005	5,404 525	3,904 857	836	20	10,1		
gebic					1,867	1,112	36		2,5		
and Traverse	1,645 2,676	. 549 1,526	257 1,207	94 283	1,859 8,667	925 2.854	154	68 68	2,0 7,0		
and Traverse atiot lisdale ughton iron.	4,815	2,024	1,295	629	4.959	8.035	416 564	140	8.7		
oughton	2,383	1,692	2	89	3,012	2,696	185		5,8		
ron	1,585 8,709	1,454 8,272	444 1,298	179 479	1,608 4,547	1,988 4,782	206 507	857 112	4,6 9,9		
nia	8,552	2,728	1,084	503	4,436	8,779	482	9	8,7		
9CO	1,016	844	124	43	1,505 598	1,639 520	114	53	8,8 1.1		
nia	1,617	1,033	581	83	2,154	1,841	175	16	4,1		
ckson	4,804	4,383 8,452	1,060 898	645 455	5,646	5,170 <b>8,9</b> 50	586 522	164 88	11,5		
ikaska	630	182	188	85	5,487 798	400	77	5	9,9		
ent	9,007	6,902 201	2,755	1,040	12,811	11,864	1,252	2	15.9		
ke	951	447	209	12 109	411 1,061	185 807	86	2	1.9		
peer	8,061	2,499	240	<b>2</b> 76	3,662	2,914	262	25	6,8		
eladaw	811 5,827	485 5.271	94 300	21 1,097	899 6,475	673 5,671	48 916	21	1,6		
vingston	2,597	2,621	816	272	2,706	2,842	348	119	6,0		
lC8	479	543	15	8	212 625	172 918	12 15	• • • • • •	1,5		
ke	2,782	8.836	130	223	8,245	8,708	217	8	7,1		
Anistee	1,805 18	1,223 148	706	162	1,668	2,328 141	212	44	4,2		
rquette	4,230	1,467	12	48	4,512	2,105	244		6,8		
MSOIN	1,299 2,365	1,011 1,166	211 683	57 187	1,697	1,578	67 333	4	3,3		
enominee	2,614 1,071	918	14	25	2,604 8,156	1,793 2,238	96	10 48	4,7 5.5		
dland	1,071	457	899	44	1,836	1,148	127	83	2,6		
ouroe	470 8,025	294 8,735	76 190	26 224	682 3,430	572 8,940	47 182	2 15	1,2 7,5		
ontcalm	8,857	2,296	1,502	178	4,480	8,495	872	46	8,3		
ntmorency	98 8,483	2,119	1,042	9 317	235 4,521	237 8,514	9 396	191	8.6		
waygo	1,971	995	1.056	203	2,448	1.932	241	100	4,7		
kland	4,849 1,687	5,101 661	815 552	522 857	5.889	5.410	589	2 23	11,3		
remaw	478	875	101	16	1,726 620	1,426 579	434 82	49	3,6 1,2		
tonagon	801	283	. <b></b>	24	808	542	2		8		
issaukee.  outcalm. outmorency uskegon ewaygo akland. eseana eemaw atonagon cecola eeda eeda mego	1,497 199	678 57	114 30	273	1,882	1,090 299	820 11	9	3,3 5		
mego	485	197	213	21.	578	484	64	14	1,00		
Manne Tale	8,758 894	2,890 202	669 28	231	4,302 408	3,191 484	268 11	57	7,81 90		
reammon	427	409	26	2	860	858	11	1	7		

PRESIDENTIAL ELECTION - Continued.

		1884	1.				1888.		
Counties.	Blaine, R.	Cleveland, R.	Butler, G.	St. John, P.	Harrison, R.	Cleveland, D.	Fisk, P.	Streeter, Un. Lab.	Totals, 1888.
Saginaw St. Clair St. Joseph Sanilae Schoolcraft. Shiawassee. Tuscola Van Buren Washtenaw Wayne Wayne Wexford.	5,939 4,017 8,261 1,923 518 2,705 2,914 4,219 4,049 17,315 1,220	6,296 3,583 2,527 1,043 289 1,671 2,086 2,088 4,983 18,794 632	1,075 1,002 1,029 777 7 1,471 537 845 332 2,056 253	205 348 133 165 22 623 322 361 617 703 130	6,728 2,940 590 4 007 5,419 3,872 3,888 4,783 4,549 21,326 1,437	8,928 2,434 589 3,187 5,286 3,217 3,112 2,986 5,482 25,986 1,065	325 245 55 513 326 180 295 458 543 877 160	54 72 12 20 203 72 13 14 23 1	16,025 5,691 1,23‡ 7,719 11,051 6,972 7,367 8,240 10,588 48,212 2,63
Totals	192,669	149,835	41,490	18,403	236,387	213,459	20,945	4,555	475.356

Blaine's plurality over Cleveland, 42,834. A fusion arrangement, however, was made between the supporters of Cleveland and Butler, by which their united vote was counted as 189,361, and Blaine's plurality reduced to 3,308. Harrison's plurality over Cleveland, 22,918.

State Election for Governor-1884 to 1888.

		1884.			1886.			1888,	8,			
COUNTIES.	Alger. R.	Begole. F.	Preston, P.	Luce, R.	Yaple, D. & G.	Dickie, P.	Luce, R.	Burt, D.	Cheney, P.			
Alcona	617	266	1	356	297	1	650	498	0			
Alger	400.00	******	section!	247	9.5	22	269	177	11			
Allegan	4,053	3,387	1,004	3,671	2,934	860	5,084	3,833	799			
Upena	1,077	1,016	56	1,119	1,256	119	1,497	1,500	11			
Antrim	1,046	726	51	906	522	64	1,310	879	113			
Arenac	314	586	56	262	551	13	350	272	4			
Baraga	401	297		349	358	6	384	412	1 22			
Barry	2,672	2,944	420	2,675	2,565	600	3,246	2,679	37			
Bay	2,930	4,683	207	2,957	4,305	182	4,364	5,422	11			
Benzie	553	374	81	521	406	103	720	406	0			
Berrien	4,410	4,450	370	4,262	3,788	534	5,100	4,725	46			
Branch	8,493	3,009	525	3,525	2,767	553	4,070	2,787	45			
Calhoun	4 979	4,315	680	4,145	3,439	964	5,770	4,372	56			
Jass	2,727	2,761	230	2,576	2,478	380	2,927	2,572	27			
harlevoix	1,072	879	67	1.044	773	157	1,285	862	9			
Cheboygan	776	902	44	714	1,031	54	1,100	1,245	7			
hippewa	678	638	28	677	816	84	1,062	903	- 7			
Clare	614	684	44	509	641	39	915	906	- 4			
Clinton	2,616	3,202	403	2,996	2,953	456	3,507	3,246	39			
Crawford	309	219	9	238	253	14	437	478				
Delta	1,198	618	6	921	735	19	1,582	1,335	1			
Eaton	4,103	3,673	543	3,903	3,377	890	4,649	3,279	58			
Emmet	767	892	124	793	827	128	965	1,042	10			
Genesee	4.117	3,760	1,103	4.517	3,021	1,104	5,408	3,913	-81			
Bladwin	286	194		297	174	40	515	367				
Gogebic	******					******	1,361	1,116	3			
Grand Traverse	1.569	838	128	1,328	624	173	1,856	926	.15			
Gratiot	2,678	2,707	312	2,912	2,603	323	8,710	2,854	38			
Hillsdale	4,260	3,166	750	4,368	2,774	706	4,952	3,068	. 56			
Houghton	2,381	1,660	72	2,298	1.844	44	2,961	2,741	18			
Huron	1,347	1,884	197	1,513	1,730	402	1.666	1,935	/19			
ngham	3,694	4.362	635	3,698	4,077	905	4,591	4,767	- 40			
onia	3,494	3,715	634	3,572	3,915	507	4,447	3,780	4			
losco	1,071	807	39	895	1.085	260	1,501	1,642	11			
ron	2,012	******		797	474		605	524				
sabella	1,605	1,604	99	1.659	1,599	124	2,156	1,846	- 27			
Jackson	4,784	5,3:6	760	4,754	4,486	839	5,650	5,241	17			
Kalamazoo	4,421	3,784	491	4,293	3,666	570	5,408	3,981	14			
Kalkaska	619	371	45	590	302	81	790	407	100			
Kent	8,843	9.684	1,166	7,763	8,670	1,531	12,798	11,816	1,50			
Keweenaw	622	202	12	398	187	1	414	182				
ake	932	671	118	877	716	139	1.046	822	1 5			
	3,000	2,722	360	2,888	2,450	344	3,693	2,904	91			
Lapeer	804	576	24	666	489	41	898	666				
Leelanaw	5,690	5,413	1,406	5,523	5,010	1,087	6,448	5,688	10			

STATE ELECTION FOR GOVERNOR - Continued.

	1884.			1886.			1888,		
Counties.	Alger, R.	Begole, F.	Preston, P.	Luce, R.	Yaple, D. & G.	Dickle, P.	Luce, R.	Burt, D.	Cheney, P.
Livingston	2,705	2,852	305	2,459	2,784	508	2,697	2,857	848
Luce							218	171	11'
Mackinac	480 2,772	557 8,438	2 254	490 2,469	591	42 266	627 8,202	910	13 214
Macomb	2,772	1,877	190	1,198	8,016 1,744	242	8,202	8,739 2,308	200
Manistee	1,827 18	1,877	190	1,196	1, 72	242	1,675	120	200
Manitou		1,446	86	8,118	1.599	80	4,898	2,204	244
Marquette	4,249 1,269	1,238	90	1,304	1,091	58	1,706	1,575	58
Mason	2,340	1,819	24	2,049	1,091	288	2,681	1,777	321
Mecosta	2,586	952	26	1,687	2,113	72	8,151	2,825	98
Menominee Midland	1.068	875	46	1,038	1,125	182	1.270	1,158	117
Missaukee	466	870	84	482	510	83	636	578	46
Monroe	8,075	8,786	295	2,547	8.095	272	8.382	3,976	187
Montcalm	8,849	8,754	215	8,595	8,285	495	4,491	8,491	363
Montmorency	90	137	ii	127	157	10	2,235	246	~~ <u>~</u>
Muskegon	8,428	8.166	<b>8</b> 81	8,137	2.821	390	4,517	8,486	405
Newaygo	1,946	2.064	210	1,814	1.696	248	2,470	1.949	238
Oakland	4.844	5,341	647	4,617	4.842	688	5,486	5,405	554
Oceana	1,597	1,218	898	1,280	1,135	500	1.718	1,421	443
Ogemaw	495	458	17	520	500	51	620	584	27
Ontonagon	298	237	22	824	765	-	809	541	3
Osceola	1,466	768	824	1,284	657	816	1.911	1,083	801
Oscoda	198	88	4	238	204	2	279	295	10
Otsego	450	418	55	413	464	118	579	484	58
Ottawa	8,655	8,059	258	8,423	2,639	826	4,814	3,180	258
Presque Isle	400	222		420	840	9	379	513	10
Roscommon	433	222 431	1	274	827	1	385	834	- 1
Saginaw	6,084	6,900	252	5,447	6,723	815	6.544	9,108	298
Sanilac	4,079	4,568	252 388	2,312	1.832	808	2,950	2,447	228
Schoolcraft	8,212	3,572	162	542	524		601	580	54
Shiawassee	1,945	1,755	198	8,034	2,834	795	4.011	8,200	494
St. Clair	561	253	14	4.074	4,368	469	5,322	5,207	308
St. Joseph	2,659	2,997	789	8,068	8,187	166	8.383	3,211	171
Tuscola	2,918	2,576	869	3,092	2,369	409	8,876	3,126	278
Van Buren	4,276	2,960	866	3,983	2,693	489	4,812	2,950	440
Washtenaw	8,934	5,259	782	3,628	4,718	814	4,556	5,478	533
Wavne	16,827	20,512	1,406	15,392	18,049	918	18,653	28,404	889
Wexford	1,219	844	192	1,116	782		1,440	1,057	157
Total	190,840	186,887	22,207	181,471	174.042	25,174	233,595	216,450	20,342

Mills, Union Labor candidate for Governor, received the following vote: Alcona 6, Allegan 126, Alpena 43, Arenac 458, Barry 153, Bay 116, Benzie 16, Berrien 29, Branch 47, Calhoun 150, Cass 9, Charlevoix 1, Cheboygan 7, Clare 10, Clinton 88, Crawford 1, Eaton 350, Genesee 20, Gladwin 2, Grand Traverse 7, Gratiot 61, Hillsdale 135, Huron 857, Ingham 106, Ionia 6, Iosco 51, Iron 1, Isabella 16, Jackson 144, Kalamazoo 31, Kent 1, Lake 2, Lapeer 22, Lenawee 22, Livingston 119, Macomb 3, Manistee 48, Mecosta 7, Menominee 48, Midland 76, Missaukee 2, Monroe 15, Montcalm 45, Muskegon 202, Newaygo 32, Oakland 2, Oceana 25, Ogemaw 49, Oscoola 9, Otsego 14, Ottawa 63, Roscommon 1, Saginaw 55, Sanilac 69, Shiawassee 12, St. Clair 20, St. Joseph 202, Tuscola 70, Van Buren 8, Washtenaw 15, Wayne 23, Wexford 1. Total 4388. The entire vote cast was 475,031. against 380,687 votes in 1886.

votes in 1886.

Cyrus G. Luce, Governor, had a plurality in 1888 of 17,145; James H. Macdonald, Lieutenant-Governor, 20,693; Gilbert R. Osmun, Secretary of State, 22,735; George L. Maltz, State Treasurer, 22,334; Henry H. Aplin, Auditor-General, 23,196; Roscoe D. Dix, Commissioner of Land Office, 23,941; Stephen V. R. Trowbridge, Attorney-General, 22,485; Joseph Estatorok, Superintendent of Public Instruction, 22,285; Perry F. Powers, Member Board of Education, 21,570.

· INCLUDING its larger water areas, Michigan

THE mainlands of Michigan, from the Ohio line to Keweenaw Point, lie between 41° 41.52° and 47° 28.68′ north latitude. Gull Islet, the northernmost land belonging to Michigan, is in latitude 48° 12.66′, and the international boundary in the waters of Lake Superior is still beyond, at 48° 20′. The extreme length of the State is thus about 450 miles. the State is thus about 450 miles. Its extreme bounding meridians are 82° 24.42' and 90° 32'. of longitude west from Greenwich, or of longitude west from Greenwich, or 5° 21.39′ and 13° 29.13′ west from Washington, making a total width, from the longitude of Port Huron to that of the mouth of the Montreal River, on the western boundary of the Upper Peninsula, of 8° 7.74', or about 325 miles, a little less than one-seventh the entire breadth of the United States on their northern limit, leaving out Alaska and its islands. From the mouth of the Montreal River, at the extreme northwestern corner of the State, to Maumee Bay, at the southeast corner, is 500 miles, almost exactly, as the crow flies. The State is near the geographical center of North America. Its own center, including water areas, is near Provemont village and the narrowest part of Carp Lake, Leelanaw county. Its land center is in Richland township, Missaukee county, six miles due east of Cadillac. The Italand center of the Lower Peninsula is in Coe township, Ivabella county, that of the Upper Pen-insula in Marquette county, six miles east of Plains Station, on the Chicago & Northwestern Railroad. The State lies in the latitudes of Central and Southern France.

# The Congressional Vote in Michigan—1888.

		•		J.O 7 C		.g 1000	•	
	•	FIRST DE				NINTH DIST	RICT.	
		Chipman, D	9. Baker, R. 9 22,076	Conley, P.	COUNTIES.	Cutcheon, R.	Hudson, D.	Ellis, P.
	Wayne Co	25,17	9 22,076	844	Antrim,	1,254 1,275	948	98.
	Plurality	8,10	ă <del>,</del>	0	Charlevolx.	1,275	879	87
		0,10	•		Kalkaska	787	412	78
		SECOND D	ISTRICT.		Lake	1 089	R1A	84
	COTTAMENS	Allon P S	tearns, D. 1	Callowe D	Manistee	1,707 1,717 2,598	2,301	292:
٠,	Hillsdale	4,996	8,076	518	Mason	1.717	1,569	53.
			5,666	.864	Mecosta	2,598	1,799	833
	Monroe	9.414	9,000		Missaukee	629	577	45-
	Washtenaw,	3,416 4,728	8,953	174	Muskegon	4 488	8.711	896-
	Washbehaw.	4,120	5,401	454	Newaygo	2,462 1,718 1,896	2,017	229
	m-to-la	¥0.000	40.000		Oceana	1 718	1,45%	431
ý,	Totals	19,660	18,096	2,010	Osceola	1,806	1,45 <b>3</b> 1,102	800
١	Plurality.	1,564			Wexford	1,437	1,071	145.
		WILLIAM DE	-		Wexioiu	1,200	1,011	1.80
		THIRD DI			M-4-1-		18.651	2.476
	COUNTIES.	O'Donnell, I	R. Pringle, D	. Bruce, P.	Totals	28,025	TOO'TO	29.40
	Barry	8,26	6 2,660 7 2,704 76 4,217 8 8,222	369	Plurality	4,874		
	Branch	4,10	07 2,704	507	1	TENTH DIST	RIOT.	
	Calhoun	5.87	76 4.217	618	COUNTIES.	Wheeler, R. 1	/miner, D. Ft	Micon, P.
	Eaton	4.67	8 8,225	597	Alcona	667	477	6.
	Jackson	6,17	75 4,689	523	Alpena	1,495	1,486	98:
	1				Arenac	3¥3	316	36-
	Totals	24,09	77 17,495	2,609	Bay	4,879	5,498	54
	Plurality	6,60	19	2,000	Cheboygan	1,090	1,265	68-
	unity	0,00			I Clare	860	851	48
		FOURTH D	ISTRICT.		Crawford	447	471	••••
			Maynard,	Comings,	Emmet	915	1,100	90-
			may natu,	Commiss'	Gladwin	568	306	8
	COUNTIES.	R.	D. 4,692	P. 400	Iosco	1,590	1,584	84
	Berrien	5,189 2,918	4,092	468	Montmorence	v 280	283	ĩ
	Cass	2,918	2,581	****	Ogemaw	665	551	11
	Kalamazoo	5,472	8,929	518	Oscoda	280	294	9
	St. Joseph	8,374	8,228	167	Ottooro	582	430	49
	Van Buren	4,746	8,084	439	Otsego		479	10
					Presque Isle	407		
	Totals	21,549	17,464	1,587	Roscommon	407	308	1
	Plurality	4,185	•	-	Tuscola	3,809	3,233	251
		-			<b>.</b>	40.000	40.044	
		FIFTH DI	STRICT.		Totals	18,959	<b>18,844</b>	824
	COUNTIES.	Belknap, R.	Ford, D. G 4 4,065	odfrev. P.	Plurality	115		
	Allegan	5,02	4 4,065	561		ELEVENTH DE	STRICT.	
	Ionia	1,44	4 4,065 2 8,887	872	counties. St	phenson, R. P	ower, D. Dov	vming,P.
	Kent,	12,560	8 12,898	932	Alger	286	160	10·
	Ottawa	4,27	8 12,898 7 2,715	193	Baraga	882	418	4
	Ottown de	2,01	,,,,,	100	Benzie	710	410	93
	Totals	26,300	28,642	2,057	Chippewa	996	951	80. 9.
			7 60,056	2,001	l Delta	1,295	1,600	9-
	Plurality	*,00	•		Gogebic	1,812	1,156	157
		SIXTH DI	STRICT.		Gogebic G'dTraverse	1.852	982	36-
				Dood D	Houghton	2,838	2,848	196
	COUNTIES.	Brewer, R.	Barnes, D. 3,389	Root, P. 299	Iron	474	646	_
	Clinton	3,430	3,388	299	Keweenaw	408	192	••· <u>·</u>
	Genesee	5,506	8,933	705	Leelanaw	871	692	49
	Ingham	4,811	5,104 2,969	458	Luce	211	172	12
	Livingston	2,683	2,965	299	Luce Mackinac	603	929	14
	Oakland	5,891	5,510	490	Manitou	5	116	14
		100				4. <b>23</b> 0		363
	Totals	21,271	20,904	2,251	Marquette	9,000	2,249	
	Plurality	367		•	Menominee.	8,088	2,890	117
		SEVENTH I	ATCHINDTOWN		Ontonagon	290	556	52 52
					Schoolcraft.	540	641	92
	COUNTIES.	whiting, D.	Hartsuff, R.	ıngails,P.	Makal-	90.000	10 000	1 100
	Huron	2,026	1,548	173	Totals	20,836	16,978	1,198
	Lapeer	2,975	3,646	218	Plurality	3,858	n. D	A. 03
	Macomb	3,792	8,183	189		nal pluralitie	s: Republi	can—2d
	Sanilac	2,539	2,905	211	district, 1,564	; 30, 6,602; 4	in, 4,185; 5th	1, 2,667;
	St. Clair	2,539 5,562	2,905 5,206	246	6th, 367; 8th,	2,085; 9th, 4,	374; 10th, 11	5; 11th,
		_			3,358;—total,	; <b>3d</b> , 6,602; <b>4</b> ; 2,085; 9th, <b>4</b> , 25,317. Dem <b>6</b> ;—total, 3,50	ocratic-1st	district,
	Totals	16,894	16,488	1,037	8,103; 7th, 40	6;—total, 3,50	0. Net Rep	oublican.
	Plurality			•	Diuranty on	tne Congressi	onal vote, 21	,0U0.
					A special e	lection in the	e Seventeent	th Judi-
		EIGHTH D	ISTRICT.					
	A 1 1 1 1 1 1 1	Bliss, Ta	rsney, Bre	ckenridge,	held the sa	me day as t	ne general e	election.
	COUNTIES.	The .		Ρ.	gave Wm. E.	Grove, R., 18	,042 votes, a	ınd Jas.
	Gratiot	3,669	2,916	<b>38</b> 0	W. Ransom, l	D., 11,781. Maj	ority for Gre	ve,1261.
	Isabella	2,180	1.888	<b>16</b> 0	The General	al Banking L	w, submitte	d by the
	Midland	1.39.53	1.185	112	Legislature t	o the electors	of Michiga	n at the
	Montealm	4.521	8,507	842	same election	n, received	48,531 "yes"	votes,
	Saginaw	7.295	8,507 8,881	243	20,300 "no:"	majority for	the law, 28,	231.
	Shiawassee.	4,061	8,166	474	The Amen	consisting of me day as the Grove, R., 18 D., 11,781. Majal Banking Law to the electors on, received majority for diment to the ircuit, courts.	State Const	titution.
		-			relative to ci	rcuit courts.	also submit	ted, re-
	Totals	23,028	20,943	1,709	ceived 21,22	dment to the rcuit courts, I votes "yes, by a majority	19,382 "n	o;" and
	Plurality.	2,085		-,	was carried	by a majority	of 1839 vote	S.
	3				, <del>.</del>			13.30
								The state of the s

#### The State Institutions.

EDUCATIONAL. THE UNIVERSITY OF MICHIGAN.—This great institution; the pride of the State, was founded in 1837, but was not opened until 1841, and four years afterwards conferred its first degrees. Seven professors then constituted its faculty, only part of whom were resident and on active duty; it now has a corps of nearly one hundred teachers, and students numbering about 1800. A Department of Medicine and Surgery was organized in 1850, and one of Law in 1859. The Homeopathit Medical College, the College of Dental Surgery, and the School of Pharmacy, have since been added; and the Department of Literature, Science and the Arts grants degrees on examination as Bachelor of Letters, Science (for courses in biology, chemistry, mining, mechanical and civil engineering, and general science), Philosophy and Arts, Master of Arts, and Doctor of Philosophy; and Doctor of Laws, or Divinity, with others, as honorary degrees. Women four years afterwards conferred its first deity, with others, as honorary degrees. Women as well as men are admitted to all schools and courses, and now form a large percentage of the students. The libraries contain about 65,000 volumes and 25,000 unbound pamphlets. There are ample scientific cabinets, and a good art gallery and a museum, in which is included the entire Chinese exhibit made at the New Orlean Expection. The University is effected Orleans Exposition. The University is situated in Ann Arbor, where it occupies a campus of forty acres, besides the site of the astronoforty acres, besides the site of the astronomical observatory. Any person, from any part of the world, may enter the institution. Students residing in the State pay \$10 matriculation fee, \$20 annual fee in the literary department, \$25 in the medical, dental, and pharmaceutical schools, and \$30 in the law school; non-residents, \$25, \$30, \$35, and \$50, respectively. Diploma fee, \$10. James B. Angell, President. Governed by Board of

Regents.
THE AGRICULTURAL COLLEGE.—This is situated upon a farm of 676 acres, three miles east of the Capitol in Lansing. It was founded by act of Legislature in 1885, and opened two years afterwards. Its purpose is defined as being "to afford thorough instruction in agriculture and the natural sciences connected therewith." Its pecuniary foundation was originally provided by the State, at a first cost of \$56,820, to which a land-grant in value more than \$1,000,000 has since been added by more than \$1,000,000 has since been added by the General Government. Its regular course extends through four years, but students in select courses are received for shorter periods. After a matriculation fee of \$5, there is no charge for tuition, but some manual labor is required. One of the experimental stations provided for by recent act of Congress, is located at the College. It has a faculty of sixteen, and about 350 students. Edwin Wil-lets, President. The State Board of Agricul-ture is its governing body.

lets, President. 1110 body.
ture is its governing body.
This is a training and practice-school, designed to prepare teachers for service in the common schools. It is at reservice in the common schools. It is at yes and the triples west of Detroit; was established in 1851, and has a faculty of twenty-four, with about 800 students, including the children in the practice department. Any member of the Legislature may nominate two pupils for the school from his district, who would be sufficient without the school of the ate two pupils for the school from his district, who receive free tuition; others pay \$10 a year, and all are required to sign a declaration of their intention in good faith to engage in the business of teaching. Both sexes are admitted. The diploma of the school is evidence in all parts of the State of legal qualification to teach in the public schools. J. M. B. Sill, Principal. The State Board of Education supervises the school

supervises the school.

1111

THE REFORM SCHOOL.—This is also situated at Lansing, and is under the general super-vision of the State Board of Corrections and Charities, and more particularly of a Board of Control. Originally opened in 1856 as a "House of Correction for Juvenile Offenders," "House of Correction for Juvenile Offenders," its name was changed in 1859 to "the Reform School." which sufficiently indicates its intent and scope. Boys between the ages of ten and sixteen years, inclusive, are committed to the School on conviction of some offense, and may be detained until they reach majority, though they are usually released upon satisfactory evidence of reformation. Making chair-seats is the principal industry taught, but tailoring and shoemaking, and other trades, are learned by some, and there is a farm of 224 acres which in part the inmates work. C. A. Gower, Superintendent.

The Industrial Home for Girls.—This cor-

THE INDUSTRIAL HOME FOR GIRLS.—This corresponds in the main to the Reform School, is responds in the main to the Reform School, is located at Adrian, and was opened in 1881. Disorderly or wayward girls of seven to seventeen years are sent to it by magistrates or county agents, and may be retained there until they are twenty-one. Margaret Scott, Superintendent. All its officers immediately

in charge are women, as are also a majority of the Board of Control. The Public School.—The State Public School for Dependent and Neglected Children was located at Coldwater in 1874. It is not was located at Coldwater in 18/4. It is not professedly an asylum or a reformatory, but a charity school, whose pupils (of both sexes) come principally from the county poorhouses, and it is made the duty of all officers administering the poor-laws of the State to send indigent children to it. If of sound health and free from contagious disease, they are required between the area of three and are received between the ages of three and are received between the ages of three and twelve, cared for in cottages containing "families" of about thirty each, schooled for about five hours a day, and in due time bound out under contracts requiring that these wards of the State shall be treated as one of the family and receive at least three months' schooling per year. Wesley Sears, Superintendent and State Agent, under a Board of Control

State Agent, under a Board of Control.

THE SCHOOL FOR THE BLIND.—This is the last of the State educational institutions sitlast of the State educational institutions sit-uated at or near Lansing, to which it was re-moved from the Deaf, Dumb, and Blind Asylum at Flint about seven years ago. It occupies the property formerly known as the Odd Fellows' Institute, now owned by the State, which has made extensive additions to the buildings. Inmates are taught common and some advanced branches in five grades, and some advanced branches in my and several manual industries are also pracand several manual manual industries are also pracand several manual man ticed. J. F. McElroy, Superintendent. erned by Commissioners.

DEAF AND DUMB ASYLUM.—The institution for educating the Deaf and Dumb was fourded at Flint in 1854, and until recent years in-cluded a department for the blind. It occu-pies grounds of 88 acres, and has a total property of about \$500,000. Ordinary school studies are pursued, and industries suitable to the sexes are taught. Michigan pupils are received without charge, and if indigent receive \$40 a year for clothing and other expenses. Local Superintendents of the Poor are required to send there all deaf-mutes of tender age within their jurisdiction. Marshall T. Gass, Superintendent. Board of Trustees. Governed by a

THE MINING SCHOOL. - The Michigan Mining THE MINING SURVOL.—LAR MINING SURVOL. A LAR MINING SURVOL. A 1885, is situated at Houghton, with free tuition to residents of the State, and a small charge to non-residents. Instruction is charge to non-residents. Instruction is mainly by laboratory and field work and

underground practice. Albert Williams, jr., Principal, with two other instructors. Gov-erned by a Board of Control.

OTHER CHARITIES.
MICHIGAN ASYLUM FOR THE INSANE. - At Kalamazoo; established by the Legislature in 1848, but not opened till 1859. It is now a great institution, with at times nearly 1000 inmates. Dr. Geo. C. Palmer, Medical Superintendent. Governed by Trustees.

EASTERN ASYLUM FOR THE INSANE.—Com-pleted and occupied at Pontiac in 1878, and has now a capacity of receiving 650 patients. Medical Superintendent, Dr. Henry M. Hurd.

Also in charge of Trustees.

NORTHERN ASYLUM FOR THE INSANE.-FORMally opened at Traverse City Nov. 30, 1885. Medical Superintendent, Dr. James D. Mun-

son. Trustees.

ASYLUM FOR INSANE CRIMINALS. — Estab-lished in 1883 at the Ionia House of Correction, and governed by the same managers.

Medical Superintendent, Dr. O. R. Long.

THE SOLDIERS' HOME. - Founded near Grand Rapids, upon a tract of 132 acres, and dedicated Dec. 30, 1886. Any indigent and honor-

ably discharged soldier or sailor of the late civil war is eligible to its benefits. Its inmates number about 415. Manager, Col. Samuel Wells. Supervised by a Board of Managers.

THE STATE PRISON.—This was planted at Jackson fifty-years ago (1839), and during some years has been self-supporting. It can provide for about 750 convicts. Warden, the beautiful provide the provide the provide that the provide the provide the provide the provide the provide the provide the provider that the provide the provider that Hiram F. Hatch; in charge of a Board of In-

spectors.

DETROIT HOUSE OF CORRECTION.—This is a local institution, but is also used for the reception of criminals from other parts of the State, and formerly received them by sen-tence of Federal courts in the West and Southwest. Joseph Nicholson, Superintendent. Ionia House of Correction.—The State

House of Correction and Reformatory was located at Ionia in 1877, and has about 750 inmates. Warden, Edwin C. Watkins, Super-

intendent.

A House of Correction and Branch State Prison for the Upper Peninsula was provided for by the Legislature in 1885, and has been located at Marquette.

# Some Comparative Geography.

The estimated population of Michigan, based upon the vote of 1888, is 2,195,092, against 1,853,658, as ascertained by the State census of 1884. Increase in four years, 341,434.
The population of Michigan Territory in 1810 was 4762; in 1820, 8765; and in 1820, 31,639.

The population of the state in 1840 was 212,267; 1850, 397.654; 1860, 749,113; 1870, 1,184,059; and 1880, 1,636,997.

By the National census of 1880, Michigan

among the States was-

First, in tons of iron ore produced, and value of the same; in ingots of copper, and value of copper mined; in salt produced, and its value; in the value of its lumber product; in popu-lation of British-American birth, and farms of 20 to 50 acres occupied by their owners.

Second, in total value of non-precious min-

erals produced.

Third, in pounds of wool produced, in Indian population, and in people of Polish birth.
Fourth, in bushels of wheat, buckwheat and
Irish potatoes, and pounds of hops produced; in sheep, and in farms of 50 to 100 acres occu-

pied by owners.

Fifth, in steam and water power employed in manufacturing; in male persons engaged in professional and personal services, and in peo-ple of English, Norwegian, Russian, or Belgic birth.

Sixth, in average daily attendance at

school, pounds of butter produced.
Seventh, in number of manufacturing establishments; gross value of farms and of farm implements and machinery; number of dwellings; persons engaged in factories and mechanical and mining industries, males so engaged; male population, the foreign-born, and people of German, Swedish, or Danish birth;

and in annual mortality.

Eighth, in capital invested in manufacturdig, wages paid to employees, farms of 50 to 100 acres, value of farm products, total State taxation, number of families, number of clerks, salesmen and accountants, all engaged in occupations, all male persons and all males in occupations, all male persons and all findles of 15 to 50 in occupations, total professionally and "personally" engaged, school houses, female teachers in schools, pupils in schools, white males of 21 years, males of voting age, national militia (18 to 45 years).

Ninth, in total population, white population, persons engaged in trade and transportation,

males so engaged, females so engaged, males

males so engaged, remaies so engaged, males 60 and over in occupations, production of oats or barley, working oxen, value of real estate or of manufactured products, number of daily newspapers or their average circulation. Tenth, in white native-born population, native-white males 21 years or over. Frenchborn population, females professionally and "personally" engaged, farmers, value of live stock on farms and of real and personal estate taration of civil divisions less than taxation of civil divisions less than counties, value of raw materials used in man-

ufacturing, and horses. Eleventh in total area, inland surface, Irish or Bohemian born population, production of grain of all kinds, milch cows, number of farms, and total taxation.

According to the Geographer of the Tenth Census, Michigan has an area of 58,915 square miles. Compared with other States, and with Territories and foreign countries, it is—

Larger than the united area of England and

Wales, by 696 square miles

Twice the size of either Scotland orIreland.
Nearly one half as large as the whole of
Great Britain and Ireland, excluding the smaller islands

Larger than the whole of New England, except Maine, by 26,805 square miles, or nearly 84 per cent, and it comes within 5080 square miles of equaling all the New England states. Three times as large as Maine, within 8755

square miles. Six and a quarter times, nearly, as large as

 $\mathbf{Vermont}$ Six and a half times, nearly, as large as

New Hampshire. Seven and a fourth times, nearly, as large

as Massachusetts More than twelve times as large as Con-

necticut More than fifty-four times as large as Rhode

Island. Nearly thirty-one times as large as Delaware. Nearly eight times as large as New Jersey. Nearly six and a quarter times as large as

Maryland. About one-fifth as large as Texas.

About one-third as large as California, Montana, or Dakota About one-half as large as Colorado or New Mexico.

About the same as Georgia or Florida.

#### Some Michigan Laws Epitomized.

The points given in preceding pages under "Legal Information" are mostly prescriptions of the common law or decisions of the courts of appeal or of "last resort," all of which are held to be good in this State. The following paragraphs represent the statutory law of Michigan upon a number of the more important subjects, brought down to include the legislation of 1887:

Every person of full age (twenty-one years for both sexes) and of sound mind may dispose of his property by will. Soldiers and sailors in actual service may bequeath property to the amount of \$300 by nuncupative (unwritten) will, proved by two witnesses. In all other cases a will to be valid must be in writing, signed by the testator or some person in his presence and by his express direction, and attested and subscribed in presence of the testator by two or more connectent of the testator by two or more competent witnesses. Devisees and legatees are incompetent subscribing witnesses, but the will is not invalidated for this reason if there are two other witnesses who are competent. A will proved and allowed in any other State or in a foreign country may be allowed, filed, and recorded in the probate court of any of our counties in which the testator has any real or personal estate. The law of 1883, allowing probate of a will by the maker or testator during his lifetime, has been nullified by decision of the Supreme Court.

DIVORCES.

Full divorce from the bonds of matrimony run divorce from the bonds of matrimony is decreed on application of the aggrieved party, for adultery, impotence, imprisonment for three or more years (pardon after divorce does not restore conjugal rights), desertion for two years, habitual drunkenness, and divorce obtained by the other party in another State. Divorce from bed and board for a limited time or for life may be greated for ex-State. Divorce from bed and board for a imited time or for life may be granted for extreme cruelty, by personal violence or otherwise, for two years' desertion, or on complaint of the wife when the husband is able to provide suitable maintenance for her, and does not. Residence in the State for one year next preceding the application is necessary, or from marriage to the time of making the applica-tion, if the marriage took place in this State.

MARRIED WOMEN. A married woman in Michigan holds her own property, acquired before or after marriage, under her separate control and at her sole disposition, without liability for her husband's debts. She may transact business in her own name and deal directly with her husband and the standard of the band as with others, and may sue and be sued on contracts the same as a single woman. The contracts she makes, however, must relate only to her separate property. Thus a note only to her separate property. Thus a note signed by her in settlement of her husband's debt is void, but a mortgage of her property to secure such a note would be held good. She holds as separate property her dower interest in the homestead, and may recover in her own name exempt property taken on execution for her husband's debt. She may bar her for her husband's debt. She may bar her dower at any time by joining the husband in a deed of conveyance, by jointure agreed to by and settled upon her before marriage, or by any pecuniary provision made for her in advance of marriage which she accepts. If she is a legatee under her husband's will, she may elect whether to take under the will or by her dower, within one year after his death.

LIMITATIONS. The statute of limitations provides that actions concerning real estate must be brought within five years after right of action or en-

....

try has accrued, if the defendant claims title under some process of court in this State, as a under some process of court in this State, as a sheriff's or administrator's sale; within ten years, if he claims under a tax deed; and fifteen years, in all other cases. Actions relating to personal property or contracts, etc., must come within six years after cause of action arises. Slander and libel suits, trespass on land, assault and battery, and false imprisonment, have only a two years' limitation; against sheriffs for malfassance in office. against sheriffs for malfeasance in office, three years; on judgments or decrees of Federal or State courts, ten years. As elsewhere, in case of matured accounts, the statute operates from date of the last entry in either account, and absence of defendant from the State is not counted under the statute.

NOTES AND BILLS.

Bills of exchange payable in this State at sight or on a future day named, and all negotiable promissory notes, orders, and drafts payable on a future certain day, have three days' grace. This is not allowed, however, on demand notes and bills, nor checks, drafts, and bills drawn on banks or bankers. No one is held to have accorted a bill unless his accort. held to have accepted a bill unless his acceptance is in writing and signed by himself or agent. A guaranty of payment of a note is itself negotiable, but subject to equities be-tween original parties. A note proves itself in court, unless its execution is denied on oath.

EXEMPTIONS.

EVERYPTIONS.

Every homestead of forty acres or less in the country, or to the amount of \$1500 value in a city or village, is exempt from execution against the householder. Also stoves, looms, and spinning-wheels put up in a dwelling for use, and one sewing-machine to each family: a seat in church; cemeteries, tombs, and rights a seat in church; cemeteries, tomos, and rights of burial; arms and accourrements required by law to be kept; wearing apparel of the person or family; family pictures; school-books and library to the amount of \$150; ten sheep with their fleeces and the yarn or cloth made from them; two cows, five hogs, and sufficient fuel and provision for six months; household goods, furniture, and utensils, to the amount of \$250; tools, implements, materials, stock, apparatus, team, vehicle, horses, harness, etc., necessary to one's business, \$250 worth; and hay, grain, or feed, growing or not, for six months' keep of such animals. Any chattel mortgage, bill of sale, or other lien upon such property, except tools and other property in business, is void, unless the wife has joined her husband in the instrument. Exemptions may be waived by either party expressly or by acts impliedly.

DEEDS AND MORTGAGES.

Aliens may execute deeds and other instru-Alens may execute deeds and other instru-ments relating to real estate, the same as resi-dents of the State. An alien woman has the same right of dower as a resident in lands ly-ing in this State, or lands of which her husband died possessed. Deeds of land must be signed in presence of two witnesses, who also sub-scribe their names, and must be acknowledged before a notery or justice or prother of serbefore a notary or justice, or another of several officers designated by the statute. The husband need not join in a deed of his wife's separate estate, but she must join in his deed, or her right of dower remains in the property conveyed. A mere scroll or scratch now anconveyed. A mere scroll or scratch now answers for a seal. If the conveyance is executed in good faith, it will not be broken for any informality in the minor matters of signing, sealing, etc., but will be held to be an agreement for a full and proper conveyance of the premises, which the courts will enforce. Mortgages of real estate are executed the same as deeds. Chattel mortgages need no

acknowledgment, witness, or seal, but are void against creditors or subsequent pur-thasers or mortgagees unless it or a copy is filed with the clerk of the township or city where the mortgagor resides. But if he is a where the mortgagor resides. But if he is a non-resident, it is filed where the property is. Such mortgage is a lien for a year after filing, but may be extended.

ATTORNEYS. There is now no law in this State prohibiting "contingent fees" to attorneys, and any agreement as to their compensation is recognized as valid.

INTEREST.

The legal rate of interest is six per cent, but parties may agree upon any rate up to and including ten per cent. A higher rate does not break a contract, but the excess can not be recovered by law.

The constitutional provisions relating to voters have been given on page 52. It has just been decided by the Supreme Court (October 25, 1888) that a voter must be held to reside. and so must register and vote, in the township or ward where he takes his regular meals. The

ELECTIONS.

or ward where he takes his regular meals. The following is the statute in regard to betting on elections: "Any person who shall either directly or indirectly bet, wager, or hazard any money or other property upon the result of the election of any officer of this State or of the United States, shall, on conviction thereof, be liable to a fine at least equal in amount to the amount of money or value of the property so bet, wagered or heaveld

amount to the amount of money of value of the property so bet, wagered, or hazarded, provided that in no case shall such fine be less than \$5 or more than \$500."

#### The New Law and Constitutional Amendment

The General Banking Law submitted to popular vote by the State Legislature of 1887, and adopted at the last November election, provides that five persons or less may associate themselves to establish discount and deposit institutions, to be known as "commer-cial banks," or offices of loan and deposit, to be designated as "savings-banks." The capi-tal stock of the bank in either case shall not be less than \$100,000, unless in villages of 10,-000 population or less, where it may be but \$50,000, or of 5000 or le-s, where the limit may be \$25,000. The banks themselves may not hold any of their capital stock, except by purchase made necessary to avoid loss from a bona fide debt before contracted. Only legal rates of interest in this State may be charged or taken upon loans and discounts made by such bank. At least half the capital stock must be paid in before a bank can open for business. If a stockholder fail to pay the in-stallments upon his stock, the bank Direc-tors are to sell the stock after giving him twenty days' notice; and if no sale is effected, such stock is canceled and withdrawn from the capital stock. If by such cancellation the capital is reduced below the prescribed mini-mum, more stock must be subscribed or the bank go into the hands of a receiver. Shares of stock are deemed personal property. Capital stock may be increased or reduced by vote of the stockholders representing at least two-thirds of the aggregate capital, at a meeting specially called to act upon such proposed increase or reduction; but no increase is held valid until the amount is actually paid in. Any real estate of which the bank comes into possession by loans or foreclosure of mort-gage must be sold within five years. Com-mercial banks are not allowed to lend on mortgage to an amount beyond fifty per cent of their capital; and they, as well as savingsbanks, must keep fifteen per cent of deposits on hand, and place two-thirds of the remain-der in United States or State bonds. In cities der in United States or State bonds. In cities of more than 100,000 people commercial banks must keep twenty per cent of deposits in re-

Any Director or other officer receiving deposits when he knows the bank to be insolvent, may be punished by both fine and imprisonment. No bank officer or employee may certify a check or draft on his bank to be good unless the amount of it is actually in hand to the drawer's credit, nor may he attempt any direct or collateral fictitious obli-gations, in order to evade this prohibition. Violation of the law by the Board of Directors works a forfeiture of their charter. Embezzlement is specially defined in the act, and may be punished by twenty years' imprison-ment. A bank organized under this law may

go into liquidation when stockholders holding at least two-thirds of the capital stock voteso to do. Real estate included in the property of to do. Reas estate included in the property of such banks may be taxed the same as other real estate in the same place, and the remainder of its capital and surplus as personal property, but assessment for taxation shall not be greater in these cases than that upon money held as individual property.

A new department of the State Government to comparing the surplus of the state o

ment is organized by the act, to supervise the execution of all our State banking laws. Its execution of all our State canking mass. Inhead is entitled the Commissioner of the Banking Department, receives his appointment from the Governor, with the advice and consent of the Senate, and has a salary of \$2500 a year. To him all banks created and operating under State laws must report quarterly, and he is authorized and empow-ered to make examination of such banks; but all facts obtained in course of such examinations must be kept secret, unless his duty to the public requires their publication or other open official act concerning a bank. He submits annually a report to the State Treasurer. to be incorporated in the Treasurer's annual report.

THE new Constitutional Amendment provides that the State shall be divided into judicial circuits, in each of which a Circuit Judge shall be elected, with a term of six years. In either of the Judicial Circuits respectively comprising Detroit and Saginaw county, the Legislature may provide for the election of more than one Circuit Judge; and in each county of the Upper Peninsula the Board of Supervisors is authorized and empowered to pay the judge of the Judicial Circuit includence when the provided in the Circuit includence when the county was allowed to the county and the county ing such county such salary as they may from time to time fix and allow.

A similar amendment for the benefit of the Detroit circuit judges was adopted by the people at the April election, 1887, and the only immediate effect of the new amendment is to make like provisions as to the number of judges in Saginaw county and their salaries.

The legal holidays in Michigan are as follow: January 1, New Year's Day; February 22, Washington's Birthday; May 30, Decomber 23, Christmas Day; and any other day upointed or recommended by the Governor othis State or the President of the United States as a day of fasting and prayer, or thanksgiving. If anyone of the holiday comes on Sunday, the next day is to be regarded as the holiday. comes on Sunday, the garded as the holiday.

Post Arthur Silver Libt.	Signification of the control of the	
T	SAILING DISTANCES.	141
1	This table of distances between	18
V	arious lake ports, was compiled	*
	y the Detroit Dry Dock Co., who	1
	ave assured the Detroit Journal	(8)
	fits accuracy The measure /	-
	ents follow the established	1
		-
	ater routes. Those from	-
	oints on Lake Erie to	1
L	ake Ontario are via	10
th	ne Welland Canal:	10
		1
+	Through Portage Canal	-
	Through Sturgeon Bay Canal	1
1	THE STATE OF THE S	4/4
		1
11:	THE THE PARTIE OF THE PARTIE O	
		1
		1
1 1 1	ESSESSED SERVICE SERVI	-
	# # # # # # # # # # # # # # # # # # #	-
		1
		5
1	BASSEL BASSEL BASSEL BASSEL BASSEL BASSEL	1
	1   1   1   1   1   1   1   1   1   1	1
		1
111	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	at.
		-
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	62
		1
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
10 10		
Direct Arthur	Section 19 (19 ) (	13/2/
	7	

THE most remarkable public work in Michigan is the great Ship Canal at Sault Ste.

farte, in the St. Mary's River, or strait confecting Lakes Superior and Huron. Ground was broken for it by the State June 4, 183; it was considered completed May 21, 1855, and the first vessel locked through its Sept. 1, 1861. June 6 of that year, the canal was transferred the first vessel, the steamer Illinois, was locked through June 18 of the same year. It is 7000 feet long. Another great lock now building on the site of the two old Each of the two locks was then 350 feet long, ones, will be 800, 100, and 43% feet in dimensions, with a cubic capacity of 3,440,000 feet.

#### The Post-Offices of Michigan.

Money-order offices marked \*; international money-order offices † (these also issue orders on Canada, Great Britain, Germany, France, Switzerland, Netherlands, Italy, Belgium, Sweden, Norway, Denmark, Portugal (including the Azores and the Madeira Islands), Algeria, Cape Colony, British India, Japan, Tasmania, Queensland, Victoria, New South Wales, the Sandwich, Windward, and Leeward Islands, Jamaica, etc.). Those marked ‡ issue postalnotes, but not money-orders, and do not pay either. County-seats in small capitals.

Aarwood, Kalkaska Co. Ashley, Gratiot. Abbott, Mason. Ashton, Osceola. Abronia, Allegan. Abscota, Calhoun. Acme, Grand Traverse. Athlone, Monroe. Ada, Kent.\* Atkins, St. Clair. Ada, Kent. Adair, St. Clair. Adamsville, Cass. Addison, Lenawee. Adrian, Lenawee. Advance, Charlevoix. Etna, Newaygo. Agnew, Ottawa. Agricultural College, Ingham Ainger, Eaton. Akron, Tuscola, Alabaster, Iosco. Alamando, Midland. Alamo, Kalamazoo. Alanson, Emmet. Alaska, Kent. Alba, Antrim. Albion, Calhoun.\* Alcona, Alcona. Alembic, Isabella. Algansee, Branch. Alger, Arenac. Algodon, Ionia. Algonac, St. Clair.\* Aigonac, St. Clair.\* Allean, Allegan.† Allen, Hillsdale.\* Allende, Ottawa. Alleyton, Newaygo.\* Allis, Presque Isle. Allouez, Keweenaw. Alma, Gratiot.\* Allman, Van Burer Almena, Van Buren. Almira, Benzie. Almont, Lapeer.\* Alpena, Alpena,† Alpine, Kent. Alto, Kent. Alton, Kent. Altona, Mecosta, Alverson, Ingham. Amadore, Sanilac. Amber, Mason. Amble, Montcalm, Amboy, Hillsdale, Ammon, Wayne. Amsden, Montcalm. Amy, Oakland. Anchorville, St. Clair. Anderson, Livingston. Annarson, Washt'n'w\* Appenzell, Crawford. Applegate, Sanilac, Appleton, Emmet. Aral, Benzie, Arbela, Tuscola. Arcadia, Manistee. Archie, G'd Traverse. Arenac, Arenac. Arendal, Manistee. Argentine, Genesee.; Arkyle, Sanilac. Arkdale, Lapeer, Arkdale, Lapeer, Arland, Jackson, Armada, Macomb,\* Arthur, Saginaw, Arvon, Baraga, Ashland, Newaygo, Ashland Center, Ne-

waygo.

Assyria, Barry. Athens, Calhoun.\* Atlanta, Montmorency. Atlantic Mine, Hough ton,‡ Atlas, Genesee. Attica, Lapeer. Atwood, Antrim. Auburn, Bay. Au Gres, Arenac. Augusta, Kalamazoo. Aurelius, Ingham. Au Sable, Iosco.\* Austerlitz, Kent. Austin, Oakland. Au Train, Alger. Averill, Midland. Avery, Berrien. Avondale, Osceola. Ayr, Emmet, Azalia, Monroe. Bachelor, Mason. BAD AXE, Huron.\* Bagley, Menominee, Bailey, Muskegon, Bainbridge, Berrien, BALDWIN, Lake, Ball, Cheboygan, Bancroft, Shiawassee Bandola, Wexford, Banfield, Barry, Bangor, Van Buren,\* Banker's, Hillsdale. Banks, Bay Bannister, Gratiot. Baraga, Baraga, Barbeau, Chippewa Barker Creek, K kaska. Barkville, Delta.\* Barron Lake, Cass. Bartlett, G'd Traverse. Bass River, Ottawa. Batavia, Branch. Bath, Clinton.\* Battle Creek, Calhoun. Bauer, Ottawa. BAY CITY, Bay. Bay de Noquette, Delta. Bowne, Kent.
Bay Mills, Chippewa.\* Boyne, Charlevoix.
Bay Port, Huron. Boyne Falls, Charle-Bay Springs, Charle voix Bay View, Emmet. Beacon, Marquette. Bear Lake, Manistee. houn. Beebe, Gratiot, Beech, Wayne, Belden, Wayne, Belding, Ionia. Bell, Presque Isle. Bellaire, Antrim.\* Bell Branch, Wayne, Belle River, St. Clair, Belleville, Wayne.\*

Bennington, Shiawassee. Benona, Oceana. Benson, Wexford. Bentley, Bay. Benton Harbor, Ber-Berryville, Otsego. Bertrand, Berrien. Berville, St. Clair. Bessemer, Gogebic.† Bethel, Branch. Betzer, Hillsdale. Big Beaver, Oakland. Big Prairie, Newaygo. Big Rapids, Mecosta.† Big Rock, Montmorèncy. Big Spring, Ottawa. Bingham, Leelanaw. Birch Run, Saginaw.‡ Bird, Oceana.
Birkett, Washtenaw.
Birmingham, Oakla'd.\*
Bismarck, Eaton. Black Lake, Muskegon. Black River, Alcona.\* Blaine, St. Clair. Blanchard, Isabella. Blendon, Ottawa. Bliss, Emmet. Blissfield, Lenawee.\* Bloomingdale, Van Bu-Bluffton, Muskegon.\* Blumfield, Saginaw. Bois Blanc, Mackinac. Bolton, Alpena. Borculo, Ottawa. Bostwick, Kent. Bowen's Mills, Barry. voix.\* Bradford, Midland. Bradley, Allegan. Brampton, Delta. Branch, Mason. Brant, Saginaw. Bridgeport, Saginaw. Bridgeton, Newaygo. Bridgeville, Gratiot. Bridgewater, Washtenaw. naw. Bridgman, Berrien. Brighton, Livingston.\* Brinton, Isabella. Bristoi, Lake. Britton, Lenawee.

Bellevue, Eaton.\* Belmont, Kent. Bennett, Lake. Clair.\* rien.†

BENZONIA, Benzie.\*
Berlamont, Van Buren.
Berlin, Ottawa.\*
Berne, Huron.
Berrien Center, Berrien.
Berrien Springs, Ber-Buel, Sanilac.
Buena, Vista, Saginaw. gan.\* Burton, Shiawassee, Butler, Branch, Ogemaw. kegon. Bear Lake, manison.
Beaver, Ontonagon.
Beaver Dam, Ottawa.
Beaver Lake, Ogemaw.
Bedell, Bay.
Bedell, Bay.
Bedford, Calhoun.\*
Brice, Gratiot.
Bridgehamton, Sanilac. Caro, Tuscola.† nee. calm.\*

Brockway, St. Clair. Brockway Centre, St. Bronson, Branch.\* Brookfield, Eaton. Brookheid, Eaton. Brooklyn, Jackson.\* Brooks, Newaygo. Brouard, Barry. Brown City, Sanilac. Brownsville, Cass.

Buena Vista, Saginaw. Bunker Hill, Ingham. Burdickville, Leelanaw. Burgess, Charlevolz. Burlington, Calhoun.\* Burnham, Manistee. Burnips' Corners, Alle-Burnside, Lapeer. Burr Oak, St. Joseph.\* Burt Lake, Cheboygan.

Butman, Gladwin. Butternut, Montcalm. Buttersville, Mason. Byers, Mecosta, Byron, Shiawassee, Byron Centre, Kent. Capillac, Wexford. † Cadmus, Lenawee. Cady, Macomb. Caldwell, Isabella. Caledonia Sta., Kent. California, Branch, Calkinsville, Isabella, Calvin, Cass. Cambria, Hillsdale. Cambridge, Lenawee. Camden, Hillsdale. Campbell, Ionia. Campbell's Corners. Corners,

Canada Corners, Mus-Canandaigua, Lenawee Canboro, Huron. Canby, Emmet. Cannonsburgh, Kent. Canton, Wayne, Capac, St. Clair,\* Carbondale, Menomi-

Carpenter, Emmet Carp Lake, Emmet, Carrollton, Saginaw Carson City, Mo Mont-

Carsonville, Sanilac.\* Cascade, Kent. Casco, St. Clair. Caseville, Huron. Cash, Sanilac.

Casnovia, Kent.\* Cass Bridge, Saginaw. Cass City, Tuscola.\* CASSOPOLIS, CASS. Cato, Montcalm. Cedar Creek, Barry. Cedar Dale, Sanilac. Cedar Lake, Montcalm. Cedar River, Menominee. Cedar Run, G'd Trav-Cedar Springs, Kent.\* Cedarville, Mackinac. Central Lake, Antrim. Central Mine, Keweenaw Centre Line, Macomb. CENTREVILLE, St. Joseph. Ceresco, Calhoun.\* Ceylon, Barry. Chadwick, Ionia. Champion. Marquette.† Chandler, Ionia. Chapel, Kent. Chapin, Saginaw. Charleston, Sanilac. Charlesworth, Eaton. Charlevoix, Charlevoix. CHARLOTTE, Eaton. † Chase, Lake.\* Chassell, Houghton. Chauncey, Kent. CHEBOYGAN, Cheboygan.t Chelsea, Washtenaw.\* Chesaning, Saginaw.\* Cheshire, Allegan. Chester, Eaton. Chesterfield, Macomb. Chestonia, Antrim. Chief, Manistee. Chilson, Livingston Chippewa Lake, Me-Chippewa Station, Osceola Chubb's Corners, Livingston. Churchill, Ogemaw Church's Corners, Hillsdale. Clam Lake, Antrim. Clare, Clare.\* Clarendon, Calhoun. Clarion, Charlevoix. Clark, Lake. Clarksburgh, Marquette. Clarkston, Oakland.\* Clarksville, Ionia. Clawson, Oakland. Clay Bank, Oceana. Clay Hill, Wexford. Clayton, Lenawee.\* Clear Water, Kalkaska Cleon, Manistee. Clifford, Lapeer. Climax, Kalamazoo.\* Clinton, Lenawee.\* Cho, Genesee.\* Cloverdale, Barry.
Clyde, Oakland.\*
Coat's Grove, Barry.
Cob Moo Sa, Oceana.
Cohoctah, Livingston.
Colly, Wonteeler. Colby, Montcalm COLDWATER, Branch. Color, Oakland.
Coleman, Midland.\*
Colfax, Wexford.
Collins, Ionia.

4

Coloma, Berrien.
Colon, St. Joseph.
Columbia, Tuscola.
Columbiaville, Lapeer.
Columbus, St. Clair.
Colwood, Tuscola. Commerce, Oakland. Comstock, Kalamazoo. Comstock, Kalama Concord, Jackson.\* Cone, Monroe.
Conger, Manistee.
Conklin, Ottawa.
Conner's Creek, Wayne
Constantine, St.
seph.\*
Conway, Emmet.
Cook's, Schoolcraft.
Cooper, Kalamazoo.
Cooper, Kalamaz Coopersville, Ottawa.\* Copley, Lake. Copper Falls Mine, Keŵêenaw. Copper Harbor, Keweenaw. Coral, Montcalm.\* Corey, Cass. Corinth, Kent. Cornith, Kent.
Corning, Allegan.
Cortland Centre, Kent.
Cottage Grove, Wayne.
Coutage Grove, Wayne.
County Line.
Covert, Van Buren.
Craig, Houghton.
Cranston, Oceana.
Crang Mecosta

Doularville, Luce.
Donaldson, Chippe
Cont, Allegan.
Cottage Grove, Wayne.
Downingson, Saniis
Crang Mecosta

Doularville, Luce.
Douladson, Chippe
Cottagen.

Downingson.
Cass.†
Covert, Van Buren.
Downingson, Saniis
Coulomber St. Clair.
Doula St. Clair.
Doula St. Clair.
Doula St. Clair.
Doula St. Clair. Crapo, Mecosta Crawford, Isabella. Crawford's Quar Quarry. Presque Isle. Creel, Huron. Cressey, Barry. Creswell, Antrim. Crofton, Kalkaska. Crooked Lake, Clare. Crosby, Kent. Crossman, Tuscola. Cross Village, Emmet. Croswell, Sanilac.\* Croton, Newaygo.\* Crow Island, Saginaw. Crystal, Montcalm.
Crystal Falls, Iron.\*
Crystal Valley, Oceana.
Cumber, Sanilac.
Cushing, Cass.
Custer, Mason. Cutcheon, Missaukee. Daggett, Menominee. Dailey, Cass. Dalton, Muskegon. Damon, Ogemaw. Danby, Ionia. Dansville, Ingham.\* Dash, Muskegon. Davis, Macomb.; Davisburgh, Oakland. Davison Day, Cass.
Dayton, Berrien.
Deanville, Lapeer.
Dearborn, Wayne.
Rure Davison Sta., Genesee. Decatur, Van Buren.\*
Deciple, Mecosta.
Deckerville, Sanilac. Deep River, Alenac. Deer Creek, Livingston. Deerfield, Lenawee.\* Deer Lake, Lake. Deer Park, Luce. Defiance, Delta. Deford, Tuscola Delaware Mine, Kewee

Dellwood, Eaton, De Loughary, Menominee. Delray, Wayne. Delta, Eaton. Delton, Barry. Delwin, Isabella Denmark, Tuscola. Dennison, Ottawa. Denton, Wayne. Denver, Newaygo. Diamond Springs, Allegan. Dickinson, Newaygo. Dighton, Osceola. Dimondale, Eaton. Disco, Macomb.
Dollar Bay, Houghton.
Dollarville, Luce.
Donaldson, Chippewa. Downington, Sanilac. Doyle, St. Clair. Drake, Lapeer. Drayton Plains, Oakland. Drenthe, Ottawa. Drummond, Chippewa. Dryden, Lapeer. Duck Lake, Calhoun. Duffield, Genesee. Duncan, Cheboygan. Dundee, Monroe.\* Dunningville, Allegan. Du Plain, Clinton. Durand, Shiawassee.‡ Dushville, Isabella.
Dutton, Kent.
Dwight, Charlevoix.
Eagle, Clinton.
Eagle Harbor, Keweenaw Eagle Mills, Marquette. Fairfield, Lenawee. EAGLE RIVER, Kewee Fair Grove, Tuscola.† naw. Fair Haven, St. Clair. Eames, Oakland. East Cohocton, Livingston. East Dayton, Tuscola East Fremont. Sanilac. East Gilead, Branch. East Greenwood, St. Clair. East Holland, Ottawa. East Jordan, Charlevoix.\* Eastlake, Manistee. East Leroy, Calhoun. Eastmanville, Ottawa.; Easton, Shiawassee. East Paris, Kent. Eastport, Antrim. East Saginaw, Sagigan. East Springport, Jack- Filer City, Manistee. son. Filion, Huron. East Tawas, Iosco.† Fillmore Centre, Alle-Delhi Mills, Washten'w. East Thetford, Genesee.

Eastwood, Saginaw, Easy, Tuscola. Eaton Rapids, Eaton.\* Eau Claire, Berrien. Echo, Antrim. Eckford, Calhoun. Ecorse, Wayne. Eden, Ingham. Edenville, Midland. Edgerton, Kent. Edgewater, Benzie. Edgewood, Gratiot. Edmore, Montcalm.\* Edson Corners, Missaukee. Edwardsburgh, Cass.\* Elba, Lapeer. Elbridge, Oceana. Elgin, Ottawa. Elk, Genesee. Elk Rapids, Antrim.† Elkton, Huron. Ellington, Tuscola. Ellis, Calhoun. Elisworth. Antrim. Elm, Wayne. Elmer, Sanilac. Elm Hall, Gratiot.\* Elmira, Otsego. Elmwood, Tuscola. Elsie, Clinton.\* Elva, Tuscola. Elwell, Gratiot. Ely, Emmet. Emerson, Chippewa. Emery, Washtenaw. Emmet, St. Clair. Empire, Leelanaw. English, Menominee. Englishville, Keut. Ensley, Newaygo. Entrican, Montcalm. Epoufette, Mackinac. Epsilon, Emmet. Erie, Monroe ESCANABA, Delta.† Esmond, Iosco.
Essexville, Bay.
Eureka, Clinton.
Evans, Kent.
Evart, Osceola. Excelsior, Kalkaska. Exeter, Monroe. Factoryville, St. seph. Fairland, Berrien. Fairview, Oscoda. Falcon. Sanilac. Fallassburgh, Kent. Falmouth, Missaukee. Fargo, St. Clair. Farmers' Creek, Lapeer. Farmington, Oakland.\* Farwell, Clare.\* Fawn River, St. Joseph. Fayette, Delta Fennville, Allegan. Fenton, Genesee.\*
Fenwick, Montcalm.
Fergus, Saginaw.
Fern, Mason. East Saginaw, Sagi-naw.† Ferris, Montcalm. Ferry, Oceana.‡ (Station S'thSaginaw.\*) Ferrysburgh, Ottawa. East Saugatuck, Alle-Fife Lake, Grand Traverse.\*

gan.

Finkton, Antrim. Fisher, Presque Isle. Fisher's Station, Kent. Fishville, Montcalm. Fishburgh, Ingham, Fiteburgh, Ingham, Five Lakes, Lapeer, Flat Rock, Wayne. Fletcher, Kalkaska, Flitts, Genesee, Flitts, Genesee, Flitts, Genesee,

Genesee. Floodwood, Marquette. Florence, St. Joseph. Flower Creek, Oceana. Flowerfield, St. Joseph. Flushing, Genesee.\* Ford River, Delta. Forester, Sanilac. Forest Grove, Ottawa. Forest Hill, Gratiot. Forestyille, Sanilac.\* Fork, Mecosta, Forman, Lake. Forsyth, Marquette. Fort Gratiot, St. Clair. \* Grand Marais, Alger. Foster City, Menominee. Fostoria, Tuscola, Fountain, Mason. Four Towns, Oakland. Fowler, Clinton. Fowlerville, Livingston.\* Francisco, Jackson. Frankenmuth, Saginaw.; Frankfort, Benzie.\* Franklin, Oakland.; Fraser, Macomb. Frederic, Crawford, Fredenia, Washtenaw. Freeland, Saginaw. Freeport, Barry.\*

Gagetown, Tuscola.\* Gaines Station, Genesee.\* Galesburgh, Kalama-Z00.\* Galfen, Berrien,\* Galt, Missaukee. Ganges, Allegan.\* Garden, Delta.\* Gatesville, Chippewa. GAYLORD, Otsego. Geary, Clinton.

Freibruger's, Sanilac.

Free Soil, Mason. Fremont, Newaygo.\*

Frontier, Hillsdale,\*

Fulton, Kalamazoo,

Fruitport, Muskegon.\*

Frost, Saginaw

Geneva, Lenawee.; Georgetown, Ottawa. Gerkey, Barry Germania, Sanilac, Gibraltar, Wayne, Gibson, Allegan. Giddings, Baraga, Gilbert, Wexford. Gilchrist, Mackinac. Gilead, Branch. Gilford, Tuscola. Gill's Pier, Leelanaw. Girard, Branch.\* Gitchel, Ottawa, Gladstone, Delta.\*

GLADWIN, Gladwin.

See.

Glendale, Van Buren. Hatmaker, Branch. Glen Haven, Leelanaw. Hatton, Clare. Glen Lord, Berrien. Glenn, Allegan. Glenwood, Cass. Gobleville, Van Buren. Godfrey, Alpena. Gogebic Station, Gogebie.

Goodell's, St. Clair. Good Harbor, Leelanaw Good Hart, Emmet. Goodison, Oakiand. Goodland, Lapeer.

Goodrich, Genesec. Gould City, Mackinac. Gowen, Montcalm.\* Graafschap, Allegan. Grafton, Monroe. Grand Blanc, Genesco. GRAND HAVEN, Ottawa.

Grand Junction, Van Buren.\* Grand Ledge, Eaton. Grand Rapids, Kent.† Grand View, Oceana. Grandville, Kent. Grant, Kent. Grape, Monroe. Grass Lake, Jackson.\* Grattan, Kent.\*

GRAYLING, Crawford. Greenbush, Alcona. Holt, Ingham.
Green Creek, Muskegon Holton, Muskegon.
Greenfield, Wayne. Homer, Calhoun.\*
Greenland, Ontonagon. Homestead, Benzie. Greenleaf, Sanilac. Hope, Midland. Green Oak, Livingston. Hopkins, Allegan. Greenville, Montcalm.† Hopkins Station, Alle-Greenwood, Ogemaw. Gregory, Livingston. Gresham, Eaton. Grindstone City, Huron Griswold, Kent. Grosse Isle, Wayne. Grosse Point, Wayne. Grove, Newaygo. Groveland, Oakland. Groverton, Houghton. Gull Lake, Barry. Fruit Ridge, Lenawee. Gun Marsh, Allegan.

Hadley, Lapeer, Hagar, Berrien. Hagensville, Presque Isle. Haire, Wexford,
Hamblen, Bay,
Hamburgh, Livingston,
Hamilton, Alleran,
Hanncock, Hour hton.\*
Hudson, Lenawee.\*
King's Mill, Le
King's Mill, Le
Kingston, Tus
Humboldt, Marquette, Kinney, Kent,
Hungerford, Newaygo, Klingensmith
Hunter's Greek Lanear Klingser's Tel-Hamilton, Allegan, Hancock, Hour hton.\* Hand Station, Wayne. Hanley, Ottawa Genesee Village, Gene- Hannah, Grand Trav-

erse. Hanover, Jackson.\* HARBOR SPRINGS, Emmet. Haring, Wexford. HARRISON, Clare, HARRISVILLE, Alcona. HART, Oceana + Hartford, Van Buren, t Hartland, Livingston, Hartsuff, St. Clair.

SPA Hartwick, Osceola. Harvard, Kent. Harvey, Marquette. HASTINGS, Barry. Glen Harbor, Leelanaw Hasty, Gratiot.

Hawkhead, Allegan. Hayes, Huron. Hazelton, Shiawassee. Helena, Huron. Hemlock City, Saginaw.‡ Henderson, Shiawas-

Henrietta, Jackson. Hermansville, Menominee Herrington, Ottawa. HERSEY, Osceola. Hesperia, Oceana.\* Hessel, Mackinac. Hetherton, Otsego

Hickory Corners, Barry Highland, Oakland. Highland Station, Oakland.

Hilliard's, Allegan. HILLMAN, Montmor-

ency. Hill's Corners, Berrien. HILLSDALE, Hillsdale,†
Hinchman, Berrien,
Hobart, Wexford.\*
Hodunk, Branch.
Holbrook, Sanilac.
Holland, Ottawa.\* Holloway, Leelanaw. Holly, Oakland.\* Holstein, Oceana. gan.\*

Horton, Jackson. Horton's Bay, Charlevoix. Houghton, Houghton. Houghton Lake, Ros-

common. Houseman, Oceana. Howard City, Montcalm.t

Howardsville, St. Joseph. Howell, Livingston.† Hoytville, Eaton.\* Hubbard Lake,Alpena Hubbardston, Ionia.\*

Hunter's Creek, Lapeer Klinger's Lake, St. Jo-Huron, Huron Huronia Beach, St.

Clair. Ida, Monroe.\* Imlay, Lapeer. Imlay City, Lapeer.\* Index, Lapeer. Indian Lake, Oscoda. Indian River, Cheboygan.

Ingalls, Menominee. Ingersoll, Clinton. Inkster, Wayne, Inland, Benzie, Hartwellville, Shiawas-Intermediate, Charlevoix.

Inwood, Charlevoix. Ionia, Ionia.t Iosco, Livingston. Iron Mountain, Menominee.\*

IRON RIVER, Iron.\*
Ironton, Charlevoix. Ironwood, Gogebic.\* Iroquois, Chippewa. Irving, Barry. Isabella, Delta. Ishpeming, Marquette.† ITHACA, Gratiot.† Ivan, Kalkaska. Jacobsville, Houghton. Jack Pine, Crawford. Jackson, Jackson. Jamestown, Ottawa. Jamestown, Ottawa. Jasper, Lenawee. Jeddo, St. Clair. Jefferson, Hillsdale. Jenisonville, Ottawa. Jenney, Tuscola. Jennings, Missaukee. Jerome, Hillsdale. Jessieville, Gogebic. Johnson, Jackson. Jones, Cass.\* Jones, Class.
Jonesville, Hillsdale.
Joy, Charlevoix.
Joyfield, Benzie.
Judd's Corners, Shia-

Juniata, Tuscola. Kalamazoo, Kalama**z**00.† Kalamo, Eaton. KALKASKA, Kalkaska Kasson, Leelanaw, Kawkawlin, Bay. Van Bu-Keelersville,

ren.\* Kellogg, Allegan. Kendall, Van Buren.\* Kenockee, St. Clair. Kensington, Oakland. Kent City, Kent.\* Kentville, Benzie. Kerby, Shiawassee, Kewadin, Antrim. Keystone, Grand Trav-

erse. Kibbie, Van Buren. Kiddville, Ionia. Kilkenny, Oakland. Kilmanagh, Huron. Killmaster, Alcona. Kimbal, St. Clair Kinde, Huron, Kinderhook, Branch, Kingsland, Eaton. Kingsley, Grand Trav-

erse.\* King's Mill, Lapeer. Kingston, Tuscola.\* Klingensmith, Otsego. seph.

seph. Klintner, Tuscola. Labarge, Kent. Lacey, Barry. Lacota, Van Buren. LaFayette, Gratiot. LaGrange, Cass. Laingsburgh, Shlawasase. see.

Lake, Newaygo. Lake Brewster, Grand raverse.

LAKE CITY, Missaukee. Lake Cora, Van Buren. Lake Linden, Houghton.\*

Lake Odessa, Ionia.\* Lake Port, St. Clair. Lake Ridge, Lenawee. Lake Side, Berrien. Lakeview, Montalin F

Lakeville, Oakland. Lamb, St. Clair. Lambertville, Monroe. Lamont, Ottawa. Lamotte, Sanilac. Lane, Ogemaw. Langston, Montcalm. L'Anse, Baraga.\* LANSING, Ingham.† Lapser, Lapeer.† LaSalle, Monroe. Lathrop, Delta. Lawrence, Van Buren.\* Lawton, Van Buren.\* Layton Corners, Sag-

Leathem, Menominee. Leaton, Isabella. Lee, Allegan. Leesburgh, St. Joseph. Maple Valley, Mont-Lee's Corner, Midland. Leesville, Wayne. Leetsville, Kalkaska. Leitch, Sanilac. LELAND, Leelanaw. Lenawee Junction, Len-

awee. Lennon, Genesee. Lenox, Macomb. Leonard, Oakland. Leoni, Jackson. Leonidas, St. Joseph.; Leonidas, St. Joseph.; LeRoy, Osceola.\* Lester, Branch. Leutz, Saginaw. Levering, Emmet. Levington Sanilao 4 Lexington, Sanilac.† Liberty, Jackson. Lickley's Corners, Hillsdale. Lilley, Newaygo. Lima, Washtenaw.

Lincoln, Mason.
Linden, Genesee.
Linwood, Bay.
Lisbon, Ottawa.\*
Litchfield, Hillsdale.\*
Littlefield, Emmet. Little Harbor, Schoolcraft. Little Prairie Ronde,

Little River, Menominee. Livonia, Wayne. Locks, Ingham. Lockwood, Kent. Lodi, Kalkaska. Logan, Kent London, Monroe. Long Rapids, Alpena. Loomis, Isabella.\* Kent.

Lorenzo, Kent Lowell, Kent.\* Lucas, Missaukee. LUDINGTON, Mason. † Lul**u, Monroe.** Lum, Lapeer. Luther, Lake.\* Luzerne, Oscoda. Lynn, St. Clair. Lyons, Ionia.\*

McBride's, Montcalm.

McClure, Gladwin. McCord's, Kent. McDonald, Van Buren.

McIvor, Iosco. McMillan, Luce. Mack City, Oscoda. Mackinac Island, Mackmac.\* Mackinaw City, Che-

pergan.\*

Macomb, Macomb. Macon, Lenawee. Madison, Livingston Mancelona, Antrim. Manchester, Washtenaw.\*

Manister, Manistee.† MANISTIQUE, Schoolcraft. Manning, Cheboygan. Manton, Wexford.\*

Maning, Cheboygam, Manton, Wexford.\* Maple, Ionia. Maple City, Leelanaw. Maple Grove, Barry. Maple Hill, Montcalm, Maple Rapids, Clinton.\* Maple Radge, Arenac. Mapleton, Grand Traverse.

calm. Marble, Mason. Marcellus, Cass.\* Marengo, Calhoun. Marenisco, Gogebic. Marilla, Manistee. Marine City, St. Clair.\* Marion, Osceola. Markell, Tuscola. Marlette, Sanilac.\* Marquette, Магquette.†

MARSHALL, Calhoun.† Marshville, Oceana. Martin, Allegan.\* Martiney, Mecosta. Martinville, Wayne. Marysville, St. Clair. Mason, Ingham.\* Masonville, Delta. Mastodon Mine, Iron. Matherton, Ionia. Mattawan, Van Buren. Mattison, Branch.

May, l'uscola.† Maybee, Monroe. Maybury, Wavne. Mayfield, G'd Traverse. McCord's, Kent. Meade, Macomb. Mears, Oceana. Meauwataka, Wexford. Mecosta, Mecosta.\* Medina, Lenawee. Melita, Bay. Melvin, Sanilac.

Memphis, Macomb.\*
Mendon, St Joseph.\*
MENOMINEE, Menominee.

Meredith, Clare. Meridian, Ingham. Merrill. Saginaw.\* Metamora, Lapeer.\* Metropolitan, Iron. Michie, Bay. comb.\* Michigamme, Mar-Newberry, Luce.\*

quette.1 Michigan Centre, Jackson

Middleton, Gratiot. Middleville, Barry.\* MIDLAND, Midland.† Mikado, Alcona. Milan, Washtenaw. Milburn, Oscoda. Milford, Oakland.\*

Millbrook, Mecosta,\* Millburgh, Berrien. Mill Creek, Kent. Millett, Eaton

Mill Grove, Allegan. Millington, Tuscola.\* Mills, Sanilac. New Troy, Berrien.

Milo, Barry. Milton, Macomb. Minden City, Sanilac.\* M10, Oscoda.\* Miriam, Ionia. Mitchell, Antrim. Moline, Allegan. Monroe, Monroe.†

Monroe Centre, Grand NorthAurelius, Ingham Traverse. North Bradley, Midland Montague, Muskegon. † North Branch, Lapeert Montelth, Allegan. North Burns, Huron. Montgomery, Allegan. North Dorr, Allegan. North Farming ton, Wonters Conserved. Montrose, Genesee. Moon, Muskegon. Moore Park,St. Joseph. Moorestown, Missaukee Moorland, Muskegon. Moran, Mackinaw. Morenci, Lenawee.\* Morey, Missaukee. Morgan, Barry. Morley, Mecosta. Morocco, Monroe. Morrice, Shiawassee. Moscow, Hillsdale.

MT. PLEASANT, Isabellat Mt. Salem, St. Clair, Mt. Vernon, Macomb,

Mud Lake, Alcona. Muir, Ionia.\* Mullet Lake, Cheboy gan.
Mulliken, Eaton.
Mundy, Genesee.
Munger, Bay.
Munising, Alger.
Munith, Jackson.
Munson, Lengue

Munson, Lenawee. Murray, Sanilac. Muskegon, Muskegon. + Nadeau, Menominee. Nahma, Delta. Nankin, Wayne. Naomi, Berrien.

Napoleon, Jackson.\* Nashville, Barry.\* National Mine, Marquette. Naubinway, Mackinaw

Navan, Genesee. Neebish, Chippewa Negaunee, Marquette. † Nelson, Saginaw. Nestoria, Baraga. Newark, Gratiot.

NewAygo, Newaygo.† New Baltimore, M.

New Boston, Wayne. New Buffalo, Berrien.\* New Era, Oceana.\* NewGroningen,Ottawa Onsted, Lenawee, New Haven, Macomb.\* Ontario, Lenawee,

Newport, Monroe. New Richmond, Allegan New Salem, Allegan. Newtownville. Baraga

Niles, Berrien.t Nirvana, Lake. Noble, Branch. Noordeloos, Ottawa. Norris, Wayne. Norrisville, Leelanaw. North Adams, dale.\* Hills-

Oakland.

North Irving, Barry. North Manitou Island, Manitou.

North Morenci, Lenswee. North Muskegon, Mus-

kegon.\* North Newberg, Shiawassee.

Northport, Leelanaw.\* North Star, Gratiot. Moscow, Hillsdale. North Unity Legisland, Moshberville, Hillsdale. Northville, Wayne.\*
Mottville, St. Joseph. Norway, Menominee.\*
Norwood, Charlevoiz.
Norwood, Charlevoiz.
Norwood, St. Joseph. North Street, St. Clair. North Unity, Leelanaw. Northville, Wayne.\* Nottawa, St. Joseph. Novesta, Tuscola. Novi, Oakland. Nunica, Ottawa.\* Oak, Wayne. Oakdale Park, Kent. Oakfield Centre, Kent. Oakfield Centre, Kent. Oak Grove, Livingston. Oak Hill, Manistee. Oakley, Saginaw.\* Oakville, Monroe. Oakwood, Oakland. O'Brien, Ontonagon.† Oceola Centre, Living-

ston. Ocqueoc, Presque Isle. Oden, Emmet. Odessa, Oscoda O'Donnell, Barry. Ogden, Lenawee. Ogden Centre, Lenawee Ogemaw Springs, Ogemaw.+

Ogontz, Delta. Okemos, Ingham. Ola, Gratiot. Old Mission, Grand Traverse.

Olds, Branch. Olive Centre, Ottawa. Olivet, Eaton.\* Olney, Shiawassee. Omard, Sanilac. Omena, Leelanaw. OMER, Arenac.\* Onekama, Manistee.\* Onondaga, Ingham. Onota, Alger.

New Haven, maconio. Ontario, Lemawee, New Haven Centre, Ontonagon, Ontonagratiot.
New Hudson, Oakland. Opechee, Houghton. New Holland, Ottawas. Orange, Ionia.
New Lothrop, Shiawas. Orange, Ionia. Orchard Hill, Alpena Orchard Lake, Oakland Oregon, Lapeer. Orion, Oakland.\*

Orleans, Ionia. Orono, Osceola Ortonville, Oakland.\*

Orville, Mackinac. Osborn, Benzie, Oscoda, Iosco.† Oshtemo, Kalamazoo. Oskar, Houghton. Osseo, Hillsdale. Ossineke, Alpena. Otia, Newaygo. Otisco, Ionia. Otisville, Genesee.\* Otsego, Allegan.\* Otsego Lake, Otsego.\* Otsego, Anlegan.

Otsego Lake, Otsego.\* Pokagon, Cass.

Ottawa Beach, Ottawa. Pompeli, Gratiot.

Ottawa Lake, Monroe. Pontlac, Oakland.\*

Ottawa Station, Ottawa Popple, Huron. Otterburn, Genesee. Otter Creek, Jackson. Otter Lake, Lapeer. Overisel, Allegan, Oviatt, Leelanaw. Ovid, Clinton.\* Owens, Missaukee. Owosso, Shiawassee,\* Ox Bow, Oakland Oxford, Oakland,\* Ozark, Mackinac. Paine's, Saginaw. Paint River, Iron. Palmer, Marquette. Palm Station, Sanilac. Palmyra, Lenawee. Palo, Ionia.\* Paris, Mecosta. Parisville, Huron. Parkinson, Gratiot. Parkville, St. Joseph. Parma, Jackson, Parmelee, Barry Parshallville, ston Partello, Calhoun. Pavilion, Kalamazoo. Paw Paw, Van Buren.† Peach Belt, Allegan. Pearl, Allegan. Peck, Sanilac. Pellston, Emmet. Pembina, Menominee. Penasa, Osceola. Penn, Cass. Pentecost, Lenawee, Pentwater, Oceana.† Pequaming, Baraga. Pere Cheney, Crawford Perrinton, Gratiot. Perrinsville, Wayne, Perry, Shiawassee.† Petersburg, Monroe,\* Petoskey, Emmet.† Pettysville, Livingston. Pewamo, Ionia.\* Phœnix, Keweenaw, Pickford, Chippewa. Pierport, Manistee. Pierson, Montcalm.\* Pike's Peak, Wayne. Pinckney, Livingston.\* Pinconning, Bay. Refford, Wayne Pinc Creek, Calhoun. Red Jacket, Hou Pinc Grove Mills, Van Redman, Huron. Buren Pine Lake, Ingham. Pine Run, Genesee, Pines, Mackinaw. Pinnebog, Huron, Pioneer, Missaukee. Piper, Ogemaw Pipestone, Berrien.

Plainwell, Allegan.\* Plank Road, Wayne, Platte, Benzie. Pleasant, Kent. Pleasanton, Manistee Pleasant Valley, Midland. Pleasant View, Emmet. Plymouth, Wayne.\* Pointe au Frene, Chippewa. Portage, Kalamazoo. Port Austin, Huron, Port Crescent, Huron. Porter, Midland. Port Hope, Huron PORT HURON, St. Clair.+ Portland, Ionia \* Port Oneida, Leelanaw. Port Sanilac, Sanilac.\* Portsmouth, Bay.\* Posen, Presque Isle. Potterville, Eaton. Potts, Oscoda. Poulsen, Mason. Powers, Menominee. Prairieville, Barry Prattville, Hillsdale. Prentis Bay, Mackinac. Prescott, Ogemaw, Presque Isle, Presque L Price, Clinton. Print, Benzie. Pritchardville, Barry Prospect Lake, Van Buren. Provement, Leelanaw. Prudenville, Roscommon. Pulaski, Jackson,
Quaker, Leelanaw,
Qnanicassee City, Tus.
Cola.
Quincy, Branch \*
Quinnese, Menominee\*
Ruby, St. Clair,
Raisin Centre, Lena wee
Raisinville, Monroe,
Rustford, Mecosta. Pulaski, Jackson, Ramsay, Gogebic, Randall, Saginaw, Rankin, Genesee, Rann's Mill, Shiawassee Ransom, Hillsdale, Rapid River, Delta, Rapinville, Mackinac. Rapson, Huron. Rattle Run, St Clair. Ravenna, Muskegon.\* Rawsonville, Wayne. Ray Centre, Macomb. Rea, Monro Reading, Hillsdale. Readmond, Emmet. Redfield, Cass. Redford, Wayne. Red Jacket, Houghton+ Reed City, Osceola. Reed's, Kent. Reese, Tuscola. Remus, Mecosta. Reno, Otrawa. Republic, Marquette Rew, Clinton. Reynold, Montcalm. Pipestone, Berrien. Reynold, Montcalm Pipestone Station, Ber-Rice Creek, Calhoun-rien. Richfield, Genesee. Pittsburgh, Shiawassee Richland, Kalamazoo.\* Pittsford, Hillsdale.\* Richmond, Macomb.\* Pittsford, Hillsdale.\* Plainfield, Livingston. Richville, Tuscola. Richmond, Macomb.\* Saugatuck, Allegan.\*
Richmondville, Sanilac. Sault de Ste. Marie,

Ridgeway, Lenawee. Riga, Lenawee Riggsville, Cheboygan. Riley, Clinton. Riley Centre, St. Clair. Ripley, Houghton. River Bend, Clinton. Riverdale, Gratiot. River Raisin, Was Washtenaw. Riverside, Berrien.
Riverton, Mason.
Riverton, Mason.
Rives Junction, Jackson Selkirk, Ogemaw.
Roberts' Landing, St. Seneca, Lenawee. Clair. Robinson, Ottawa. Rochester, Oakland.\* Rock, Delta. Rockery, Antrim. Rockford, Kent.\* Rockland, Ontonagon. Rogersville, Genesee. Rollin, Lenawee. Rome, Lenawee. Romeo, Macomb.+ Romulus, Wayne. Rondo, Cheboygan. Roots, Jackson. Roscommon, Roscommon. Rose, Oakland. Roseburgh, Sanilac. Rosedale, Chippewa. Roseville, Macomb. Roseville, Macomo. Rosina, Ionia. Ross, Kent. Rothbury, Oceana. Rowland, Isabella. Roxana, Eaton. Ruth, Huron. Ryerson, Muskegon. Ryno, Oscoda. SAGINAW, Saginaw.†
St. Charles, Saginaw.\*
St. Clair, St. Clair.† St. Clair. Ash Vashtenaw.\*
Salzburgh, Bay.
Salzburgh, Bay.
Salzburgh, Bay.
Salzburgh, Bay. Samaria, Monroe Sammon's Landing. Oceana. Sand Beach, Huron.† Sand Hill, Wayne. Sand Lake, Kent.\* Sands, Marquette. Sandstone, Jackson. Sandusey, Sanilac.\* Sanford, Midland. Saranac, Ionia.\* Chippewa, †

Sawyer, Berrien. Scammon, Chippewa. Schaffer, Delta. Schoolcraft, Kalamazoo.\* cio, Washtenaw. Scio, Washtenaw. Scofield, Monroe. Scott's, Kalamazoo.\* Scottville, Mason.\* Seney, Schoolcraft.\* Sethton, Gratiot. Seymour Lake, Oa Oakland. Shabbona, Sanilac Shaftsburgh, Shia-Rockland, Unioned Rock River, Alger.
Rockwood, Wayne.
Rodney, Mecosta.\*
ROGERS CITY, Presque Shelbyville, Allegan.
Shepardsville, Clinton.
Shepardsville, Clinton.
Shepardsville, Clinton. wassee. Shaw, Presque Isle. Shepherd, Isabella.\* Sheridan, Montcalm.\* Sherman, Wexford.\* Sherman City, Isabella. Sherwood, Branch.\* Shetland, Leelanaw. Shiloh, Ionia. Shingleton, Alger. Shoup, Oakland. Sickels, Gratiot. Siddons, Mason. Sidney, Montcalm. Sigel, Huron. Silver Creek, Allegan. Simons, Antrim. Sister Lakes, Van Buren. Six Lakes, Montcalm. Skanee, Baraga. Slocum's Grove, Muskegon. Smith, St. Clair. Smith's Corners, Oceana Smith's Creek, Saint Clair. Smyrna, Ionia. Snowflake, Antrim. Sodus, Berrien. Solon, Leelanaw Clair, St. ( lair.† Somerset, Hillsdale, Clair Springs, St. Somerset Centre, Hillsdalę. Clair.

St. Elmo, Midland.
St. Helen, Roscommon.
St. Ignace, Mackinac.† South Allen, Hillsdale.
St. James, Beaver Is South Arm, Charlevoix land, Manitou.\*
South Blendon, Ottawa South Boardman, Kalkaska,\* South Butler, Branch. South Camden, Hillsdale. South Cass, Ionia. South Fairfield, Lena-Southfield, Oakland. South Frankfort, Ben-South Grand Blanc, Oakland. South Grand Rapids, Kent South Haven, Van Buren.\* South Jackson, Jackson. South Lyon, Oakland.

South Manistique, Sylvester, Mecosta. Schooleraft. South Manitou, Manitou

South Monterey, Alle-

Sova, Cheboygan. Spalding, Menominee. Sparta, Kent.† Speaker, Sanilac. Spencer Creek, Antrim. Spencer's Mill, Kent. Spink's Corners, Ber-

Arbor, Jack-Spring son.t Springdale, Wexford. Spring Grove, Allegan. Spring Lake, Ottawa.\* Springport, Jackson.\* Spring Vale, Charle-Spring VOIX.

Springville, Lenawee. Stacy, Grand Traverse. Stalwart, Chippewa. Stambaugh, Iron. Standaugn, 1ron. Standish, Arenac.\* Stanton, Montcalm.† Stan City, Missaukee. Star City, Missaukee. Stark, Wayne. Starrville, St. Clair. Steans, Midland. Steiner. Monroe. Steiner, Monroe. Stella, Gratiot. Stephenson, Menom-

inee. Sterling, Arenac. Stetson, Oceana. Stevensburgh, Chip-

Stevensville, Berrien.\* Stirlingville, Chippewa. Stittsville, Missaukee. Stockbridge, Ingham.\* Stony Creek, Washtenaw.

Stony Point, Jackson. Stover, Antrim. Strasburgh, Monroe. Strickland, Isabella. Strenach, Manistee. Strongville, Chippewa. Sturgis, St. Joseph.\* Sugar Grove, Mason. Sullivan, Muskegon, Summerfield, Clare, Summerton, Gratiot. Summerville, Cass. Summit City, Grand

Traverse. Sumner, Gratiot.\* Sun, Newaygo. Sunfield, Eaton. Superior, Chippewa. Sutton, Lenawee.; Sutton's Bay, Leelanaw Swartz Creek, Genesee.\*

see.\* Sylvan, Washtenaw. cam.~ Zion, St. Clair.

عر عك

Talbot, Menominee. Tallmadge, Ottawa. Tallman, Mason. TAWAS CITY. IOSCO.† South Rockwood, Mon-roe.

Taylor Centre, Wayne Taymouth, Saginaw. Tekonaha, Calhoun.\*

Temperance, Monroe. Texas, Kalamazoo. Thayer, Oakland. Thomas, Oakland Thompson, Schoolcraft Thornton, St. Clair. Thornville. Lapeer. Thorp, Wexford. Three Oaks, Berrien. Three Rivers, St. Jo-

seph.† Thumb Lake, Charle-Thurber, Lenawee. Tipton, Lenawee. Tompkins, Jackson. Tonquish, Wayne.

Tonquish, Wayne. Topinabee, Cheboygan. Torch Lake, Antrim. Totten, Lake. Towns, Branch. TRAVERSE CITY, Grand

Traverse.t Trent, Muskegon. Trenton, Wayne. Trowbridge, Cheboygan.

gan.
Troy, Oakland.
Trufant, Montcalm.\*
Turin, Marquette.
Tuscola, Tuscola.\*
Tustin, Osceola.\*
Twin Lake, Muskegon.
Tyre, Sanllac.
Tvrone, Livingston. Tyrone, Livingston. Tyrrell, Oscoda. Ubly, Huron. Ula, Kent. Unadılla, Livingston.
Undine, Charlevoix.
Union, Cass.
Union City, Branch.\*
Union Home, Clinton. Union Pier, Berrien. Unionville, Tuscola.\* Upton, Clare. Upton Works, St. Clair.

Urania, Washtenaw. Urban, Sanilac. Utica, Macomb.\* cona.
Valley Centre, Sanilac. West Haven, ShiawaVandalia, Cass \* see. Van Decar, Isabella. Vanderbilt, Otsego.

Van Zile, Houghton. Vassar, Tuscola.† Venice. Shiawassee. Ventura, Ottawa. Vermontville, Eaton.\*

Verne, Saginaw. Vernon, Shiawassee.\* Verona Mills, Huron. Vestaburgh, Mont-

Vickeryville, Montcalm Wetzell, Actrim. Vicksburgh, Kalama-

zoo.\* Victor, Clinton. Victory, Mason. Vienna, Montmorency. Vine, Iosco. ogel Centre, Missau-

kee Volinia, Cass.; Volney, Newaygo. Vriesland, Ottawa. Vulcan, Menominee. Wacousta, Clinton. Wadsworth, Huron. Wahjamega, Tuscola. Wakefield, Gogebic.\* Wakelee, Cass.

Waldenburgh, Macomb Waldron, Hillsdale, Wales, St Clair. Walker, Kent. Wallace, Menominee. Wallace, Menominee,
Wallaceville, Wayne,
Walled Lake, Oakland.
Walton, G'd Traverse.
Waltz, Wayne.
Warren, Macomb.
Wasepi, St. Joseph.
Washington, Macomb.
Waterford, Macomb.
Waterloo, Jackson.
Waters, Otsego.
Waterseet, Gogebic.

Watersmeet, Gogebic. Watervliet, Berrien.\* Watrous ille, Tuscola.

Watson, Allegan. Wauceda, Menominee. Wayland, Allegan.\* Wayland, Allegan, Wayne, Wayne, Wayne, Wayne, Weberville, Ingham.\*
Webster, Washtenaw.
Weldon, Benzie.
Weldon Creek, Mason. Wellington, Crawford, Wells, Delta.

Wellsville, Lenawee We-que-ton-sing, Emmet. West Bay City, Bay. † WEST BRANCH, Oge-

maw.\* West ('ampbell, Ionia. West Carlisle, Kent. West Casco, Allegan. West Detroit, Wayne. West End, Wayne. West Harrisville, Al-

West Leroy, Calhoun. West Millbrook, Mecosta West Olive, Ottawa. Weston, Lenawee. Westphalia, Clinton. West Sebewa, Ionia. West Sumpter, Wayne. West Troy, Newaygo. Westville, Montcalm. West Windsor, Eaton. Westwood, Kalkaska,

Zutphen, Ottawa.

Wexford, Wexford. Wheatfield, Calhoun. Wheatland, Hillsdale. Wheeler, Gratiot. Whipple, Grand Traverse.

White, Hillsdale. White Cloud, Newaygo Whitefish Point, Chippewa. Whiteford Centre,

Monroe Whitehall, Muskegon,\* White Lake, Oakland. White Oak, Ingham. White Pigeon, St. Joseph.\*

White Rock, Huron, Whiteville, Isabella. Whitewood, Wayne, Whiting, Lapeer. Whitmore Lake, Washtenaw.

Whitney, Ment. Whitneyville, Kent. Washtenaw.

Whittemore, Iosco. Wickware, Sanilac. Wilderville, Calhoun. Wildwood, Cheboygan. Willard, Bay. Williams, Kalamazoo. Williamsburgh, Grand Traverse.

Williamston, Ingham.\*
Williamsville, Cass. Willis, Washtenaw. Wiley, Mason. Wilmot, Tuscola. Wilson, Menominee. Winfield, Ingham. Wingleton, Lake. Winterfield, Clare. Wise, Isabella. Wisner, Tuscola. Wixom, Oakland. Wolverine, Cheboygan. Woodburn, Oceana Woodin's Mills, Isabella Wood Lake, Montcalm. Woodland, Barry.\* Woodinere, Wayne. Wood's Corners, Ionia. Woodstock, Lenawee. Woodville, Newaygo. Wooster Hill, Newaygo

Worden, Washtenaw. Worth, Arenac. Wright, Ottawa. Wright's Bridge, Midland. Wyandotte, Wayne.†

Wyman, Montcalm. Yankee Spring, Barry. Yates, Manistee, York, Washtenaw, Yorkville, Kalamazoo, Ypsilanti, Washtenaw, Yuba, Grand Traverse Zeeland, Ottawa.\* Zilwaukee, Saginaw.

The report of State Treasurer Maltz for the fiscal year ending June 30, 1888, shows that the balance on. hand June 30, 1887, was \$74,785.53. The receipts for the year were \$3,183,798.51; payments, \$3,869,308.04; balance in the treasury June 30, 1888, was \$1,186,567.70.
The disbursements were as follows: Appropriations, \$224,603.37; boards, \$42,006.68; col-

leges and schools, \$339.420.31; prisons and reformatories, \$234.787.27; miscellaneous; \$125,-649.05; expenses of State government, \$526,-746.74; expenses of State institutions charged, back to counties, \$7.001.59; salaries, \$259.457.51; taxes, \$291.646.85; legislature, \$967.82; transfers, \$424.811.93; balance to June 30, 1888, \$903,857.83; total, \$3,881.016.36.

# Detroit.

#### The City Government.

[Compiled from Kronberg's Municipal Manual, with corrections.]

JOHN PRIDGEON, Jr., Mayor. Salary, \$1200 a year. Chas. H. Brucker, Mayor's Secretary. \$1500. William B. Moran, Controller. \$3000

Peter Rush, Deputy Controller. \$2000.
Augustus G. Kronberg, City Clerk. \$2500,
James H. Kelly, Deputy City Clerk. \$2000.
Thomas P. Tuite, City Treasurer. \$3000.
John W. Corcoran, Deputy City Treasurer. \$2000.

Simon C. Karrer, Receiver of Taxes. Peter Terner, Assistant Receiver of Taxes.

John W. McGrath, City Counselor, \$2500. Frederick H. Warren, Assistant City Coun-\$1500.

William S. Sheeran, City Attorney. \$2500. Robert T. Gray, Assistant City Attorney. \$2000

H. D. Ludden, City Engineer. \$2500.
W. H. Craig, J. K. Mitchell, Assistant City
Engineers. \$1500 and \$1100.
Henry P. Sanger, Chief Accountant. \$2500.
James Rodgers, Gas Inspector.

Silas Farmer, Historiographer.

Hiram Jackson, Market Clerk. \$ Gustave Pfeffer, Boiler Inspector \$1600. Michael Carney, Engineer of City Hall.

Dennis Dullea, Elevator Engineer. \$1034. Anthony Clements, Weighmaster Eastern ivision. \$1100. Edward E. Heslan, Weighmaster Western ivision. \$1100. Division.

Division.

Dominick Latour, Poundmaster and Wood Inspector Eastern Division. \$900. Anthony Karschina, Poundmaster

Wood Inspector Western Division. \$900. Peter Hirth, Charles Eggeman, Meat Inspectors. Each, \$1200.

Charles Hauser, Henry Smith, Inspectors of Chimneys.

The Common Council of Detroit now consists of but a single chamber, the Board of Aldermen, composed of two members from each ward, 32 in all, half of whom are elected at the annual city election in November. Each Alderman receives a salary of \$600 a year. Until the second Tuesday of January, 1889, the Board of Aldermen is constituted as follows: JOHN CONSIDINE, President.

Charles K. Trombly, President pro tempore.

Augustus G. Kronberg, Clerk.
James H. Kelly, Deputy Clerk.
Henry P. Sanger, Chief Accountant and
Secretary of Committees.

A. H. Bachman, Sergeant-at-arms.

David Ponosky, Messenger. \$3 a week. Members.

1st Ward-Thomas Fairbairn, James B. Lauder.

2d.—Julius P. Gilmore, Seymour Finney.
2d.—Julius P. Gilmore, Seymour Finney.
3d.—Frank N. Reves, Geo. F. Reichenbach.
4th—Lou Burt, Stephen H. Griggs.
5th—John Ch. Jacob, Charles P. Karrer.
6th—Benj. Guiney, John Considine.
7th—John P. Martz, Frank T. Ricear 7th—John P. Martz, Frank T. Bleser. 8th—John E. Lally, Dewitt C. Kellogg. 9th—Chas. K. Trombly, Ernest L. Reschke.

10th-James Hayes, (one vacancy. James Hartness, Jr.; Michael Mc-11th-Guire.

12th-Joseph Pfeifer, James Tierney.

13th—Jacob F. Meier, Wm. O'Regan. 14th—David Peterkin, Wm. Uthes. 15th—James Holihan, Frank Smith. 16th—Ferdinand Amos, John McIntyre

At the last election George Dingwall was elected Alderman from the First Ward, in place of Thos. Fairbairn; James Vernor from place of Thos. Fairbairn; James Vernor from the Second, in place of Seymour Finney; Sixth, James Lennane, in place of John Considine; Eighth, Fred Cronenwett, in place of John E. Lally; Ninth, Frank Schmidt, in place of Ernest L. Reschke; Tenth, Anthony H. Reynolds, in place of Aug. Kronberg, resigned during the year; Eleventh, Henry Boettcher, in place of James Hartness, Jr.; Twelfth, Robert Murphy, in place of Joseph Pfeifer; Thirteenth, John Kessler, in place of Jacob F. Meier; Fourteenth, Neil Grant, in place of David Peterkin; Sixteenth, Frank Wolzke, in place of John McIntyre. They will take their seats January 8, 1889. The remainder of the Alderman whose terms then expire, and are Alderman whose terms then expire, and are not named in this paragraph, were re-elected.

THE CITY BOARDS.

Board of Estimates.
Anthony Valentine. President, Anthony

Secretary, A. G. Kronberg.

Members, at large, Louis Campau, Patrick
H. Dee, John Erhard, Anthony Petz, John Japes

1st Ward-Adolph Hoffman, James A. Randall.

2d—Thomas McGraw, Henry O. Walker. 3d—Joseph Funke, Jacob B. Pospeshil. 4th-Edwin C. Hinsdale, James A. Phelps. 5th—John Chateau, Theodore Gorenfio. 6th—Michael Powell, Patrick H. Hickey.

6th-Michael Powell, Patrick H. Hickey.
7th-Adam Betzing, Sr., Martin Bayer.
8th-Anthony Schneider, Edward A. Doran.
9th-Edward Welsh, Anthony Valentine.
10th-John Diedrich, Thaddeus Galvin.
11th-Henry Merdian, Geo. Sunderland.
12th-Anthony Grosfield, Geo. W. Wilson.
13th-Morris F. Cousino, Michael Lambert.
14th-Richard Beaublen, Neil Grant.
15th-Christopher Damitio, John R. Russel.
16th-Patrick Nestor, John Sarbinowski.
Members of the Board ex officio are the

Members of the Board ex officio are the President of the Common Council and Chairman of its Committee of Ways and Means, the City Controller, City Counselor, President of the Board of Education, the Boards of Water, Police, and Fire Commissioners, and the counter recommend the President of the Council of Water, Folice, and Fire Commissioners, and the senior members of the Boards of Public Works and of Inspectors of the House of Correction. They take part in the deliberations of the Board, but do not vote. It is the office of this Board to consider the general city estimates and the senior was the property. mates and all measures for raising money by tax-levy or bond-issues, and to decrease or disapprove, but not increase, the same. Only amounts approved by the Board can be raised Members receive \$3 for each day of actual session.

Board of Assessors.
Assessors, Jeremiah D. Long, Cha.
Garrison, John J. Perrin. Each, \$2500. Charles M. Assistant Assessors, James L. Buchanan, John Haire, Albert W. Hill. Each, \$1500. Chief Clerk, Michael Halloran. \$1500.

Board of Education.
President, Wm. V. Moore.
Secretary, John R. King. \$2500. Treasurer, Albert Ives.

Superintendent, Wm. E. Robinson. \$4000. Supervisor of Property, Robert Wallace. \$1800.

Members, Horace N. Dickinson. George H. Fowler, Thomas J. Halloran, John A. Hickey, Henry J. A. Leteker, William V. Moore, Cor-nelius J. O Flynn, George D. Stewart, John B. Todenbier, William Voigt, Jr., Charles I. Walker, Herschel Whitaker, James H. Brewster, the Mayor and Recorder, ex officio. Members unsalaried.

Board of Health

Health Officer, Samuel P. Duffield, M. D.

\$3000. City Physicians, Angus McLean, M. D., M. H. Andrews, M. D., Hugo Erichsen, M. D.

Each, \$1500. Clerks, A. F. Schulte, Wm. Lockhart, M. D. \$1400 and \$1200.

Disinfector, Zina Pitcher, M. D.
Milk Inspector, Clifton H. Tilden.
Members, Peter Klein. M. D., Wm. Brodie,
M. D., E. A. Chapoton, M. D., the Mayor, Controller, and President of the Police Commissions. sion, ex officio.

Public Library Commission.
President, James V Campbell.
Vice-President, Richard Storrs Willis.

Vice-President, Richard Storrs Willis.
Secretary, Herbert Bowen.
Treasurer, Albert Ives.
Librarian, Henry M. Utley. \$2000.
Commissioners, Magnus Butzel, Levi L.
Barbour, George S. Hosmer, Herbert Bowen,
James V. Campbell, Richard S. Willis, the
President of the Board of Education, ex
officio. Unsalaried.

Board of Public Works.

President, Wm. H. Langley.
Secretary, John Campbell. \$2000.
Assistant Secretary, J. C. Oldfield.
Permit Clerk, Francis X. Lingemann.
Sidewalk Inspectors, John Demass, Jr.,
Michael Foley, Harry L. James, John A.
Wilkie, James Downs, Thomas A. Coleman,
Each, \$1084.
Members, Wm. H. Langley, Thomas McGrath, James Hanley. Each \$2500.

Board of Police Commissioners.

President, Wm. C. Colburn.
Secretary, Lincoln R. Messerve. \$2000.
Members, Wm. C. Colburn, Horace M. Dean,
M. S. Smith, Sidney D. Miler.

Superintendent of Police, Jas. E. Pittman,

Deputy Superintendent, M. V. Borgman. \$1800.

Captains of Police, C. C Starkweather. Joseph Burger, W. H. Myler, Jesse Mack.

Each, \$1700.

Each, \$1700.

Sergeants of Police, A. H. Bachman, A. H. Britton, Wm. Thompson, Ben High, Eugene Sullivan, G. H. Thomas, Wm. Nolan, James Purdue, George H. Thompson, Joseph F. Krug, John Martin, E. F. Culver. Each, \$1000.

Attorney, Wm. A. Moore \$1000.

Surgeon, J. B. Book, M. D. \$1000.

Board of Fire Commissioners.

President, Peter Henkel.

Vice-President, W. J. Stapleton.

Secretary, James E. Tryon. \$2200.

Members, Peter Henkel, W. J. Stapleton, R. W. Gillett, Bruce Goodfellow.

Chief Engineer, James Battle. \$2500.

R. W. Gillett, Bruce Goodfellow.
Chief Engineer, James Battle. \$2500.
Assistant Chief Engineer and Supply Agent.
James R. Elliott. \$1800.
Listrict Engineers, John Kendall, James C.
Broderick. Each. \$1200.
Superintendent Telegraph, Wm. J. Gardiner.

\$1500. Department Surgeon, Wm. Brodie, M. D. Fire Marshall, Wm. H. Baxter. \$1800. Assistant Fire Marshal, B. F. Wright. \$1000.

Veterinary Surgeon, Robert L. Jennings.

500. Board of Water Commissioners. President, Jacob S. Farrand. Vice-President, Marshall H. Godfrey. Secretary, [vacant\*]. \$300. Superintendent, Henry Bridge. \$240 Assistant Superintendent, John I

\$2400. John Bridge. \$960.

Engineer, John E. Edwards. \$2200.

Members, Samuel G. Caskey, Marshall H.
Godfrey, Jacob S. Farrand, John Pridgeon,
Joseph Nagel. Each, \$2500.

\*By the recent lamented death of Mr. Henry
Starkey, who had filled the office most acceptably for 14 years.

Board of Park Commissioners.
President, Joseph A. Marsh.
Vice-President, August Marxhausen. Secretary, John R. Stirling. \$2000. Superintendent, Wm. Ferguson. \$1200. Members, Elliott T. Slocum, Joseph Marsh, August Marxhausen, Francis Adams.

Board of Poor Commissioners.
President, W. K. Muir.
Vice-President, Siegmund Simon. Treasurer, Joseph B. Moore. Secretary, P. H. Dwyer. Superintendent of the Poor, J. F. Martin.

Commissioners, W. K. Muir, term expires June 30, 1899; S. Simon, June 30, 1890; Wm. V. James, June 30, 1891; Joseph B. Moore, June 30, 1891. \$1500.

Board of Building Inspectors.
President, E. R. Harris.
Secretary, E. W. Simpson.
Members, E. R. Harris, E. W. Simpson, Fred
Canney. Fach, \$1200.
Board of Inspectors of the House of Cor-

rection Inspectors, Albert Chittenden, Albert Ives, Jr. F. Wm. Lichtenberg, Jeremiah Dwyer. Superintendent, Joseph Nicholson. Physician, Augustus Kaiser, M. D.

Boulevard Commission The Mayor and the Board of Public Works, ex officio.

Secretary, John Campbell. \$100.

JUDICIAL.

Recorder's Court. Judge, George S. Swift. \$4000. Clerk, George H. Lesher. \$1800. Deputy Clerk, Charles R. Bagg. Stenographer, Wm. W. O'Brien. \$1800 \$2000.

Police Justices, John Miner, Edmund Haug. Each, \$3000.

Clerk, Patrick J. Sheahan. \$1800. Assistant Clerks, Charles S. Hathaway, Jos. Thierry. Each \$1200.

Thierry. Each \$1200.

Justices' Court.

Justices, Walter Ross, John Patton, Joseph C. Gibson, Henry A. Robinson, Clerk, Overton L. Kinney.

Mr. Kinney was elected a Justice of the Peace at the November election, 1888, and will take his seat July 4, 1889, in place of Henry A. Robinson, whose term then expires.

THE assessed valuation of property in Detroit for 1888 was \$152,299,140, against about \$10,000,000 less in 1887. The total valuation of the rest of Wayne county is but \$28,377,000.

The death-rate of the city during the year 1887, the last year yet reported, was 18.12 per 1000 inhabitants, base on a population of 200.000, as calculated from the school census.

The present area of the city is 22 square miles. There are 99 miles of public sewers, 158 of lateral sewers, and 137 miles of paved

#### The Public Service.

POLICE DEPARTMENT.

Besides the board of officers before mentioned, the Police Department and Force of Detroit includes 24 roundsmen, 253 patrol-men, 15 doormen, 3 signal operators, 3 signal timekeepers, I telephone boy, I Harbor-mas-ter's boy, 2 hostlers, and 1 janitor. Two of the roundsmen who serve as detectives receive each \$1000 a year; the other roundsmen \$800. Six patrolmen acting as detectives and one as Harbor-master receive salaries of \$1000; one as city sealer, \$900; and six as precinct officers, \$900. The remaining patrolmen receive each \$900; the doormen, \$700; signal men, \$480 and \$300; boys, \$350 and \$300; hostlers, \$600; and janitor, \$340. The regular station-houses are: The Central Police Station in the headquarters building at the intersection of Randolph, Bates, and Farmer streets; Woodbridge-street Station, on Wood-bridge street, east of Woodward avenue; the Eastern Police Station, corner of Russell and Gratiot streets; Elmwood-avenue Station, between Lafayette and Croghan streets; Trum-Trumbull bull-avenue Station, corner of Street and Michigan avenue; Twentieth-street Station, between M. C. R. R. and Michigan avenue; Fremont-street Station, on Fremont near Woodward avenue; Twenty-fourth-street Station, on Woodbridge street, east of Twenty-fourth street; Grand River avenue Station, corner of Grand River avenue and Twelfth street; Chene-street Station, on Fremont street, near Chene street.

#### FIRE DEPARTMENT.

The Detroit Fire Department comprises, besides the officers before named, a paid force of 286 men, in charge of 15 steam and 3 chemical fire-engines, 6 hook and ladder apparatus, and 3 supply wagons. There are kept in re-serve, without companies, 1 first-class and 1 second-class steam fire-engine, 2 hose-carts, one 1 hose-wagon with hose, 1 hook-and-ladder apparatus, and 1 fire-escape. The fire-alarm telegraph has 262 miles of wire and 186 alarm-boxes. The street-hydrants number 2 hose-carts, 1281, and the reservoirs 300.

WATER-WORKS.

The water service of the city has a total pipeage, including the two large mains, of 323 miles. It maintains 379 fire-hydrants and 312 claterus for use in case of fire. The pumping-works are on the Detroit river above the city, worst are on the Detroit river above the city, four miles from the City Hall, and contain three engines, with an aggregate daily capacity of 78,000,000 gallons, and eight boilers. The aggregate pumping in 1887 was 13,168,895,808 gallons, a daily average of 86,079,166 gallons. Estimated value of the works Jan. 1, 1888, \$4,091,453.

THE PUBLIC LIBRARY occupies one of the finest and most convenient buildings in the country, built expressly for library purposes, and opened to the public Jan. 22, 1877. With a large extension in 1885, for reading-room, museum, and offices, its total cost is about \$160,000. The Library now numbers over 80,000 bound volumes and 10,000 pamphlets. It is open from 9 A. M. to 9 P. M. daily, except Sundays and holidays, and above 14 years of age, upon signing an agreement to observe the rules of the Library and furnishing a surety, may have a card upon which books may be drawn out for home which cooks may be drawn out for nome reading, and any person, citizen or stranger, who wishes for a book to read in the building, is supplied with it. The reading-room is open daily from 9 A. M. to 9 P. M., except on Sundays and holidays, when it is open from 2 to 9 P. M., and free to all. There are on file 32 daily newspapers of the chief cities of this country, and unwards of 200 coursels and country, and upwards of 200 journals and magazines, which embrace the leading religious, scientific, art, and literary publications of the world, in the English, French, and German languages. There is also a scientific man languages. There is also a scientific museum in the building, which is open free to the public every day (Sundays included) from 2 to 5 p. m.

occupy, high-school and 50 other buildings (several of them leased), with from 1 to \$5\$ rooms, and 39 to 1814 sittings, each. Total number of sittings, 19,971. Total value of property, about \$1,500,000. Number of teachers employed, 438. THE PUBLIC SCHOOLS

### The City Railways.

Woodward-avenue line, 3 miles, from the intersection of Atwater and Brush streets, at the Brush-street depot, up Woodward-avenue to the steam-railway crossing.

Jefferson avenue line, 5 miles, from the

Cerural depot on Jefferson-avenue to Cadillac

Boulevard.

Gratiot-avenue line, 2½ miles, from the inter-section of Woodward and Jefferson-avenues to Monroe-avenue, up Monroe-avenue to Randolph-street, up Randolph-street to Gratiot-avenue, and up Gratiot-avenue to the city limits

Michigan-avenue line, 2½ miles, from the intersection of Woodward and Jefferson-avenues, up Woodward-avenue to Michigan-avenue, up Michigan-avenue to the Detroit &

Toledo railroad track.

Brush and Russell-street line, 3 miles, from the intersection of Woodward and Jeffersonavenues, up Woodward-avenue to Monroe-avenue, up Monroe-avenue to Randolph-street, up Randolph-street to Brush-street, up Brush-street to Ohio-street to Brush-street up Brush-street to Ohio-street along Ohio street to Antoine-street, up Antoine-street to Farns-worth-street, along Farnsworth-street to Rus-sell-street, up Russell-street to the Lake Shore & Michigan Southern railway.

Trumbull-avenue line, from the intersection of Atwater and Randolph-streets, up Randolph to Congress, along Congress to Seventh, up Seventh to Howard, along Howard to Trumbull-avenue, up Trumbull-avenue to Warren-avenue.

Congress and Baker-street line, 23/4 miles, Congress and Baker-street line, 272 miles, from the intersection of Atwater and Randolph-streets, up Randolph to Congress, along Congress to Seventh, up Seventh to Baker, and down Baker to Twenty-fourth-street. Cass-avenue and Third-street line, from the Control Part of Third-street in a read-

Cassavenue and Imru-street line, from the Central Depot, foot of Third-street, to Larued-street, up Larned to Griswold-street, up Gris-wold to State-street, down State-street to Cass-street, up Cass to Ledyard-street, down Led-yard to Third-avenue, and up Third-avenue to the Holden road.

Fort Wayne & Elmwood line, 10 miles, from the Boulevard down Champlain-street to Elmwood-avenue, to Croghan-street, to Ran-dolph-street, to Cadillae Square, to Wood-ward-avenue, thence down West Fort-street to Clark-avenue, to River road, to Fort Wayne, and the village of Delray. From the corner of Clark-avenue and Fort-street down corner of Clark-avenue and Fort-street down Fort-street to Woodmere cemetery.

Grand River-avenue line, 216 miles, from

the intersection of Woodward and Jeffersonavenues, up Woodward-avenue to Grand River, up Grand River to Sixteenth street.

Myrtle-street line, 1½ miles, from Grand River-avenue to Twenty-fourth-street. Detroit Electric line, 2 miles, from Twenty-fourth street, on the Dix road, into Spring-

Highland Park line, electric motor, 314 miles, from railway crossing on Woodward-avenue out that thoroughfare to Highland

East Detroit and Grosse Point line, electric, 614 miles, from the intersection of Jefferson-avenue and Cadillac Boulevard to Grosse

#### The Mayors of Detroit.

1824–25, John R. Williams. 1826, Henry I. Hunt. 1827–28, John Biddle. 1829, Jonathan Kearsley. 1830, John R. Williams. 1831, Marshall Chapin. 1832, Levi Cook. 1833, Marshall Chapin. 1834, C. C. Trowbridge. 1834, Andrew Mack. 1835–36, Levi Cook. 1837, Henry Howard. 1838, Augustus Porter 1838, Augustus Porter. (Resigned.) 1838, Asher Bates. 1839, DeGarmo Jones. 1839, Jedarmo Jones. 1840-41, Zina Pitcher. 1842, Douglas Houghton. 1843, Zina Pitcher. 1844-46, John R. Williams. 1847, James A. Van Dyke. 1848, Frederick Buhl.

1849, Charles Howard.
1850, John Ladue.
1851, Zachariah Chandler.
1852-83, John H. Harmon.
1854, Oliver M. Hyde.
1855-59, John Patton.
1860-61, Christian H. Buhl.
1862-83, William C. Duncan.
1864-65, Kirkland C. Barker.
1866-67, Merrill I. Mills.
1862-71, William W. Wheaton.
1872-75, Hugh Moffat. 1872-75, Hugh Moffat. 1876-77, Alexander Lewis. 1876-77, Alexander Lewis. 1878-79, George C. Langdon. 1890-83, William G. Thompson. 1884-85, S. B. Grummond. 1886-87, M. H. Chamberlain. 1888-89, John Pridgeon, Jr.

#### The Detroit River, Etc.

The strait connecting Lake St. Clair with Lake Erie, commonly called the Detroit River, is one of the finest streams of its length on the globe, and is sometimes honored as "the Dardanelles of the New World." It is 28 miles long by half a mile to three miles wide, in average breadth one mile, and average depth 34 feet. Its waters flow with a gentle current of 1.79 to 2.44 miles an hour, and furnish the city with one of the best water-supplies in the land. Its islands are celebrated for their picturesque beauty and avecellent. for their picturesque beauty and excellent sanitary conditions. One of them, Grosse Isle, is a favorite residence suburb; and another, Belle Isle, at the head of the river, has been purchased and improved for a city park. The following lines upon the river are from the pen of the late Charles B. Howell:

Steadily onward, onward
Its royal tide doth flow,
Beneath the clouds of midnight And the midday sun's bright glow. Its pure, refreshing waters Come down from the inland seas, And the glad, white wings of commerce Float o'er it in the breeze.

The volume of its waters. As mighty night and day; Through all the changing seasons It does not shrink away, And when the heavens are opened, And the mountain torrents pour Their floods o'er the land, this river Flows onward as before.

O calm, majestic river! O quiet yet mighty flood: Speaking in musical whispers, Like the still, small voice of God. Symbol ye are, O River, Of the stream beyond the strife, By the throne forever flowing The glad, pure River of Life.

THE license system of the city requires an annual payment for steam ferry-boats of erected in 1871-72 at a cost of \$60,000.

\$250, theatres \$200, museums \$50, circus and menagerie (transient), first day \$75, each fol-lowing day \$50; platform scales \$25, pawh-brokers \$20, wagon pediers with two horses \$15, auctioneers, meat or fruit pediers and row boats \$10, two-horse drays \$6, hacks \$5, intelligence offices, express wagons, ball-alleys and billiard-tables \$5, transient shows \$5 first day, \$1 each day after, female dogs \$2.10, one-horse drays and foot pedlers \$2, male one-norse trays and root penders \$2, male dogs, scavengers, porters and runners, engineers and hack-drivers \$1, boiler-tenders or firemen, and meat-shops 50 cents, newsboys 10 cents. Licenses issued by the Mayor, upon certificate from the Secretary of the Police Department that fees have been paid Department that fees have been paid.

THE legal rates of hack or omnibus fare in Detroit, as provided by city ordinance, are 50 cents for carrying one person from one place to another within the city limits. Children under ten years of age, if accompanied by parents or guardians, are carried free to the number of two; half-fare for each beyond two. number of two; half-fare for each beyond two. Any public conveyance may be hired by the hour for not more than four persons, at \$1.50 for the first hour, and \$1 for each additional hour; fractions of an hour at proportional rates; each additional passenger, 25 cents an hour. Carriages by the day, \$5. For each trunk carried 15 cents may be charged, but nothing for any piece of baggage weighing less than 50 lbs. Between 11 P. M. and 5 A. M., one-half more than any of the foregoing rates may be charged. The Mayor settles controversies relating to these rates.

Musical Societies in Detroit: Concordia Society (German). Detroit Musicale. Harmonie Society (German). Lyra Singing Society (German). Musical Protection Union. Philharmonic Club. Teutonia Singing Society (German). Veteran Musical Society (German). Zither Club (German).

THE Soldiers' Monument was designed by the celebrated sculptor, Randolph Rogers, and

# The November Election in Detroit and Wayne County, 1888.

	3 1		1
	A	rei .	
	ਰੰ		6
WAYNE COUNTY.	Cleveland,	Harrison	Pro.
	vel	F	Fisk, 1
	le.	0	30
	0	H	14
First Ward	1 591	1,701	58
Second Ward	1,521 1,194 1,486 1,261	1.639	
Third Ward	1.486	1.145	17
Fourth Ward	1,261	1,403	82
Fifth Ward. Sixth Ward. Seventh Ward. Eighth Ward.	1.50831	984	10
Sixth Ward	1,658 1,747 1,374	1,121	52
Seventh Ward	1,747	724	8
Eighth Ward	1,374	1,089	52
	2.205	1,159	
Tenth Ward Eleventh Ward	1,478	1,303	84
Eleventh Ward	1,080	1,158	89
Twelfth Ward	1,095	867	
Thirteenth Ward	679	669	
Fourteenth Ward	681 639	606 275	23
Fifteenth Ward	514	439	38
Brownstown.	255	289	
Canton	171	114	
Dearborn	223	256	
Canton Dearborn Ecorse. Greenfield	316	338	
Greenfield	249	217	
Grosse Point	433	144	
Hamtramek	311	240	1
Huron	220	237	9
Livonia	194	170	22
Monguagon	245	209	
Nankin Plymouth	331	314	
Plymouth	887	518	109
Redford	239	214	
Redford	182	166	
Springwells	460	566	
Sumpter	195	192	
Taylor	86	140	
Van Buren Wyandotte	276	219	
Wyandotte	364	455	9
p. 1 - The second second second second	OF 078	01 900	877
Wakala	20,010	61,044	011
Totals		2-30	2 votes
	lidate.	nag 2	
Streeter, Union-Labor cane	d Seve	nth V	Vards.
Streeter, Union-Labor cane	d Seve	nth V	Vards.
Streeter, Union-Labor can each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.	d Seve	nth V d 15 ir	Vards, n Mon-
Streeter, Union-Labor can	d Seve	nth V d 15 ir	Vards, n Mon-
Streeter, Union-Labor can each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.	d Seve	nth V d 15 ir	Vards, n Mon-
Streeter, Union-Labor can each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.	d Seve rse and Harris	nth V d 15 ir	Vards, n Mon-
Streeter, Union-Labor can each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over STATE OFFICE	d Seve rse and Harrise rs.	nth V d 15 ir	Vards, n Mon-
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over STATE OFFICE Governor.	d Seve rse and Harris rs.	nth V d 15 ir on, 4,	Vards, n Mon- 654.
Streeter, Union-Labor caneach in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Luce B.	d Seve rse and Harrise Rs.	nth V 1 15 ir on, 4,	Vards, n Mon- 654.
Streeter, Union-Labor caneach in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Luce B.	d Seve rse and Harrise Rs.	nth V 1 15 ir on, 4,	28,404 18,653 889
Streeter, Union-Labor caneach in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Luce B.	d Seve rse and Harrise Rs.	nth V 1 15 ir on, 4,	28,404 18,653 889
Streeter, Union-Labor caneach in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Luce B.	d Seve rse and Harrise Rs.	nth V 1 15 ir on, 4,	28,404 18,653 889
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over STATE OFFICE Governor. Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.	d Seve	nth Vd 15 in	Vards, n Mon- 654. 28.404 18,653
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over STATE OFFICE Governor.  Burt, D. Governor. Luce, R. Cheney, P. Mills, U. L.  Burt's plurality, 9751.  Lieut-Govern	d Seve rse and Harrise Rs.	nth V d 15 ir	Vards, n Mon- 654. 28,404 18,653 889 23
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over STATE OFFICE Governor.  Burt, D. Governor. Luce, R. Cheney, P. Mills, U. L.  Burt's plurality, 9751.  Lieut-Govern	d Seve rse and Harrise Rs.	nth V d 15 ir	Vards, n Mon- 654. 28.404 18,653 889 23
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over STATE OFFICE Governor.  Burt, D. Governor. Luce, R. Cheney, P. Mills, U. L.  Burt's plurality, 9751.  Lieut-Govern	d Seve rse and Harrise Rs.	nth V d 15 ir	Vards, n Mon- 654. 28,404 18,653 889 23
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over STATE OFFICE Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern Moran, D	d Seve rse and Harrise Rs.	nth V d 15 ir	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over STATE OFFICE Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern Moran, D	d Seve rse and Harrise Rs.	nth V d 15 ir	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22 25,994 21,294
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all.  Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern  Moran, D. Macdonald, R.  Williams, P. Marvin, U. L. Moran's plurality, 6429.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22 25,994 21,294
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern Moran, D. Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.	d Seve rise and Harrise RS.	nth V d 15 ir on, 4,	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Moran, D. Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.	d Seve orse and Harrise RS.	nth V 1 15 in	Vards, n Mon- 654. 28.404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Moran, D. Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.	d Seve orse and Harrise RS.	nth V 1 15 in	Vards, n Mon- 654. 28.404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.  Auditor.  Apolin, R.  Preeen, D.  Auditor.	d Seve orse and Harrise RS.	nth V d 15 ir	Vards, n Mon- 654. 28.404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Eco guagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Lieut-Govern Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.  Auditor.  Apolin, R.  Preeen, D.  Auditor.	d Seve orse and Harrise RS.	nth V d 15 ir	Vards, n Mon- 654. 28.404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905 22
Streeter, Union-Labor cane each in the First, Fourth an 1 in the Thirteenth, 1 in Ecoguagon; 23 in all. Cleveland's plurality over  STATE OFFICE  Governor.  Burt, D. Luce, R. Cheney, P. Mills, U. L. Burt's plurality, 9751.  Moran, D. Macdonald, R. Williams, P. Marvin, U. L. Moran's plurality, 6429.  Treasurer. Morton, D. Maltz, R. Wise, P. Winnie, U. L. Morton's plurality, 4700.	d Seve orse and Harrise RS.	nth V d 15 ir	Vards, n Mon- 654. 28,404 18,653 889 23 26,817 20,388 906 22 25,994 21,294 905

			200			t Legi	same o	200.			mx0-11	*	`	
		1	COLO	publica	us.			1		De	mocra		, y	
DE- TROIT.	Ralph.	Dust.	Bettinger.	Tillman,	Winslow.	Wagner.	Ellis.	Wheaton.	Randall.	Huebner.	Dee.	Weitlaufer	Murtagh.	Jasnowski
1st Wd. 2d Wd 3d Wd. 4th Wd. 5th Wd. 6th Wd. 7th Wd. 10th Wd. 10th Wd. 11th Wd. 12th Wd. 13th Wd. 14th Wd. 15th Wd. 15th Wd. 15th Wd. 16th Wd. 16t	1,797 1,726 1,127 1,465 956 1,168 743 1,114 1,259 1,316 1,136 668 622 286 523	1,851 1,754 1,309 1,502 1,178 1,248 863 1,153 1,454 1,413 1,328 949 757 659 329 530	1,740 1,654 1,177 1,479 1,094 1,194 824 1,165 1,227 1,323 1,207 909 689 626 301 528	1,775 1,700 1,173 1,441 972 1,194 910 11,22 1,280 1,341 1,177 915 671 631 285 527	1,754 1,688 1,099 1,419 962 1,164 728 1,106 1,118 1,300 1,117 888 664 629 279 523	1,651 1,137 1,402 1,092 1,198 838 1,098	1,740 1,604 41,02 1,399 980 1,604 771 1,126 1,190 1,300 1,192 893 625 615 293 627	1,891 1,079 1,415 1,145 1,930 1,513 1,639 2,097 1,888 1,025 998 627 650 581 785	1,475 1,221 1,391 1,216 1,860 1,543 1,583 1,583 1,362 993 993 625 642 608 728	1,503 1,166 1,539 1,245 2,048 1,617 1,718 1,369 2,128 1,462 1,112 1,031 685 666 631 739	1,147	1,097 1,540 1,184 1,799	1,142 1,474 1,204 1,929 1,583 1,699	1,43: 1,124 1,50: 1,21: 1,974 1,60: 1,72: 1,32: 2,16: 1,54: 1,03: 1,05: 62: 62: 62: 73:
Totals.	16.820	18,075	17,033	17,199	16,508	16,950	16,640	19,534	19.362	20.619	20,599	19,398	20,203	21,418
Huebne Dee's p Weitlan Murtag Jasnow Grosse P Greenfiel Hamtran Livona	Secono	l Legi Wells	slative	e Distreiner, S 1 2	<i>ict.</i> D. Dw	2890. 3. rfee,P. 	Ral Milt San Pl	liam P ner D. n A. G ane's p ph Phe on E. ( nuel Ph nelps's	lps, ji Carlet ielps, plura	Trea r., D on, R. P lity, 5,	surer.	 		26,482 20,649 849
Plymout	1		521 284	8	88 19 —	107	Micl Jam Bo	ert E. haei P les Jar olger's	Rould nison, plural	, R , D P lity, 8,	300.			25,290 21,990 853
Redford.		_	683								a Atte	1120 MI		
Redford. Totals. Wells's	plura	1 lity, 49			t make		Jam	ies V. ]	<i>Pros</i> e D. Wil	lcox,	Ŕ	y.		24.583
Redford. Totals. Wells's	plural Third De	ity, 49 Legis	lative R. 1 532	Distra Balus, 1 4 2	D. C 92 29	obb,P.	Jam Sam Joh	es V. l uel W. n H. Pe	Prose D. Wil Burre owell, plurs	lcox, loughs, P	R D 947.			24,583 12,636 837
Redford.  Totals. Wells's	plural Third De	Legis	lative .R. 1 532 250 455	Distration Distration 1	D. C 92		Jam Sam Joh	es V. l uel W. n H. Pe	Prosection	lcox, loughs, Plity, 1 Court jr., D.	Ř D ,947. Comm	ission	ers.	24,583 12,636 837 25,313
Redford. Totals. Wells's Springwe Dearborn Nankin Canton Totals. Deming	plural Third De	Legis Legis ming	lative R. 1 532 250 455 136 ———————————————————————————————————	Distr Balus, 1 2 2 1 1,0	O. C 92 29 01 50 	10 20 11 42	Jam Sam Joh	es V. l uel W. n H. Pe	Prose D. Will Burre owell, plura cuit ( idine, Rasch, omas, vatson Abrey	cutin lcox, oughs, P lity, 1 Court jr., D. R P , D	R	ission	ers.	24,583 22,636 837 25,313 22,007 843 25,337
Redford. Totals. Wells's Springwe Dearborn Nankin Canton Totals. Deming	plural Third De	Legis Legis ming	lative R. 1 532 250 455 136 ———————————————————————————————————	Distr Balus, 1 2 2 1 1,0	O. C 92 29 01 50 	10 20 11 42	Jam Sam John W John Fran Wm Lou Geo Cha	nes V. ]  nuel W. n H. Po  ilcox's  Cin n Cons nk A. I. S. Th  is C. W  rge T.  posidin  atson's	idine, Rasch, omas, atson Abrey Lowr e's plura	jr., D. R P , D , R ie, P. urality lity, 2	Comm	ission	ers.	25,313 22,007 843 25,397 27,707 872 3,306
Redford. Totals. Wells's Springwe Dearborn Nankin Canton Totals. Deming	plural Third De	Legis Legis ming	lative R. 1 532 250 455 136 ———————————————————————————————————	Distr Balus, 1 2 2 1 1,0	O. C 92 29 01 50 	10 20 11 42	Jam Sam John W John Fran Wm Lou Geo Cha CC W	ies V. ] uuel W. n H. Pe ilcox's Cin n Cons nk A. I n. S. Th is C. W rge T. rles J. onsidin atson's	idine, Rasch, omas, atson Abrey Lowr e's plura thoney	jr., D. R P , D , R ie, P. urality, 2  Aud , D R	,630.	ission	ers.	25,313 22,007 843 25,397 27,707 872 3,306
Redford. Totals. Wells's Springwe Dearborn Nankin Canton Totals. Deming	plural Third De	Legis Legis ming	lative R. 1 532 250 455 136 ———————————————————————————————————	Distr Balus, 1 2 2 1 1,0	O. C 92 29 01 50 	10 20 11 42	Jam Sam John W John Fran Lou Geo Cha Cc W Wm Mich Fran Ma	nes V. 1 nuel W n H. Pe ilcox's Cin Cons nk A. I. S. Th is C. W rge T. rles J. rles J. onsidin atson's c. C. Ma nael K neis H. ahoney mas M.	idine, tasch, omas, vatson Abrey Lowre's plura thoney ilcline Fairn 's plu	jr., D. R P , D , R ie, P. urality, 2  Aud , D , R nan, P. rality,	,630.	ission	ers.	25,318 22,007 848 25,337 22,707 872 3,306 25,744 21,315 860
Redford. Totals. Wells's Springwe Dearborn Nankin Canton Totals. Deming	plural Third De Ills Third Thi	Legizeming,	lative R	Distr. Balus, 1 4 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	O. C 92 29 20 50 	10 20 11 42	Jam Sam John W John Fran Lou Geo Cha Cc W Wm Mick Fran Mick Fran	nes V. 1 nuel W n H. Po ilcox's Cin n Cons n Cons n S. Th is C. W rge T. rles J. rles J. rles J. c. C. Ma nael K. cis H. hhoney	cuit ( idane, idane, casch, omas, atson Abrey Lowr e's plura honey ilcline Fairm 's plu Camp ittion.	Jourt jr., D. jr., D. R, P. , D, R. , P. urality, 2  Aud T, D. , R. , R.  Surv pau, D	,630. litor. ,4,429.	ission	ers.	25,313 22,007 25,397 25,707 22,707 3,306 25,744 21,315 860 4,562

COMMON COUNCIL—ALDERMEN.	Thirteenth Ward.
First Ward.	John Kessler
George Dingwall	Henry J. Naumann 658
Isaac W. Campbell	Kessler's plurality 85
Dingwall's plurality 648	Fourteenth Ward.
Second Ward.	Neil Grant
James Vernor.         1702           George W. Chandler.         1090           Vernor's plurality.         612	Frank Goodman 520 Grant's plurality 348
Third Ward.	Fifteenth Ward.
George F. Reichenbach	Frank Smith 650
Frank C. Kuenzel 981 Reichenbach's plurality 604	Solon Burt
Fourth Ward.	Sixteenth Ward.
Lou Burt	Frank Woltzke 725
Wm. H. Eberts	John McIntyre
Fifth Ward.	Justice of the Peace.
John Ch. Jacob	Overton L. Kinney, D.         19,446           Hugh McClelend, R.         17,218
Jacob's plurality	Kinney's plurality
James Lennaue	
Wm. C. Hausher 1328 Lennane's plurality 107	CONSTABLES. First ward, Brown, R.; Second ward, Wil-
Seventh Ward.	coxon, R.; Third ward, Weitz, D.; Fourth
Frank J. Bleser	ward, Sparling, R.; Fifth ward, Gnau, D.
Adolph Roth	Sixth ward, Donovan, D.; Seventh ward, Finucan, R. and D.; Eighth ward, Robertson, D.
Bleser's plurality	Ninth ward, Bowers, D.; Tenth ward, Downey
Eighth Ward.	D.; Eleventh ward, Mass, R.; Twelfth ward
Frederick Cronenwett 1261	Snyder, D.; Thirteenth ward, Doherty, R.
Wm. B. Thompson	Fourteenth ward, F. Favor, D.; Fifteenth ward, Corby, D.; Sixteenth ward, Sebilsky, D
Ninth Ward.	ward, Corby, D., Sixteenin ward, Seonsky, D
Frank Schmidt	BOARD OF ESTIMATES.
Ernest L. Reschke	First ward, Mulheron, R.; Second, McGraw R.; Third, Funke, D.; Fourth, Hinsdale, R.
Schmidt's plurality 240	R.; Third, Funke, D.; Fourth, Hinsdale, R.
Tenth Ward, Anthony H. Reynolds1457	Fifth, Chateau, D.; Sixth, Whalen, D.; Seventh, Kock, D.; Eighth, Arens, D.; Ninth
Anthony H. Reynolds1457	Wuellner, D.; Tenth, Remington, D.; Eleventh
Samuel J. Brown 1296 Reynold's plurality 161	Sinig. R.; Twelfth, Taepke, R.; Thirteenth
Eleventh Ward.	Galster, R.; Fourteenth, Beaubien, D.; Fil
Henry Boettcher	teenth, Damitio, D.; Sixteenth, Markey, D.
Charles J. Wieser	Election inspectors, five to each ward, wer also chosen.
Twelfth Ward.	General Banking Law-Yes, 15,538; no, 40
Robert H. Murphy	majority, yes, 15,129.
Frank H. Addison. 723 Murphy's plurality. 12	Constitutional Amendment—Yes, 2136; no 966. Majority, Yes, 1170.
Delate of Interest I	

#### Points of Interest in and About Detroit. [See also following list of Charities.]

Armory of the Light Infantry, Congress East, near Woodward. Detroit Light Guards, Old Firemen's Hall.

Art Museum, Jefferson and Hastings Art Stores, Woodward, above Campus and

Grand Circus. Athletic Club Grounds, 833-65 Woodward.

Bagley Fountain, Campus Martius.

Bar Library, Sietz Block, near Post-office. Belle Isle Park, head of Detroit River; reached by ferry from foot of Woodward and Chrupau aves.

Bloody Run and the remnant of the Pontiac

tree, Jefferson, near Adair.

Board of Trade Building and U. S. Signal Service, Jefferson and Griswold. Boat-houses, foot of Joseph Campan ave. Book-stores, on Woodward, between Larned

and Grand River. Second-hand book-stores, 35 Michigan ave., and Grand River, near Woodward.

Bridge and Iron Works, Foundry street and M. C. R. R.

Boulevards, north and east sides of the city. Calvert lithographing establishment, Larned and Shelby.

Canadian suburbs, particularly Windsor and Campus Martius. Sandwich.

Cemeteries-Elmwood and Mt. Elliott (Cath-

olic), east end; Woodmere, west end. Central Depot, foot of Third street. City Hall and Tower, Campus Martius. Cleveland Steamers, foot of Wayne street. County Jail, Clinton and Beaubien.

Crematorium, Springwells. Cyclorama, battle-pictures,

arned

Detroit College (Catholic), 355-77 Jefferson. Detroit Electrical Works, Woodbridge and Seventh.

Detroit Female Seminary, Adams ave. W. and Grand Circus.

Detroit Opera House, Campus Martius. Edison Electric-light Works, State and

Washington.

washington. Electric Railways, East Detroit, north end Woodward ave., and West end. Ferry & Co.'s Seed-store, near White's Opera House. Seed-farm and garden, Grand River, near city limits. Test-gardens, Ferry ave., four blocks from Woodward.

Glass-works, Delray, below city.
Grand Circus Park, four squares above

Fire Department Headquarters, Larned and Wayne; also Engine-house head of Griswold,

waying and propeller is housed.

Fireman's Hall, now the Light Guard Armory, Jefferson ave. and Randolph.

Grant house, formerly occupied by Gen.

Grant house, for Grant, 253 Fort E.

High School, formerly Territorial and then State Capitol, Griswold and State.

Historic Sites-Fort Pontchartrain, Cadillac's nsorie sues-rort Foncenartrain, Cadillac or of Outotic helow Jefferson ave.. near Michigan Exchange, about corner of Woodbridge and Wayne. Fort Shelby, about corner of Fort west and Shelby. Fort Croghan or "Nonsense," Park and High. Cannar Nonsense, "Cadillac or old Cadillac or old pau house, 140 Jefferson ave. Cass house, 194 Larned.

Hamtramck house, corner Wesson place, East Detroit, a well-kept example of the old French dwelling, which Col. Hamtramck owned and in which he died.

Market Buildings, Campus Martius and Cadillac Square. Michigan Car Works, West Detroit.

Michigan (Republican) Club-house, 92 Fort

THE DETROIT JOURNAL office, 40 Congress

Peninsular Car Works, Riopelle street and Milwaukee R. R. Police Headquarters, Randolph, near White's Opera House.

Post-office and Custom-house, Griswold and Larned

Public Library, Gratiot, near Woodward, and Museum connected with it.
Pullman Palace Car Works, Croghan and St. Aubin ave.

Railway Ferries, at Central, Milwaukee, and Union depots. These great vessels are among the largest of the kind in the world. Brush Electric-light Works, Foundry street

and Central R. R. Recreation Park, Brady, between Beaubien and Brush.

Skating-rinks — The Detroit, Larned and Randolph; the Princess, Second, near Grand River.

Soldiers' and Sailors' Monument, Campus Martius

Telephone Central Office, 68 Griswold. Union Grain Elevator, Union depot (1,300,-

000 bushels capacity). Water-works, East Detroit.

Western Union Telegraph Office, Griswold and Congress west.
White's Opera House, Randolph, near Mon-

Whitney's Opera House, Griswold, above Michigan ave.

Wonderland (dime museum), 78 Woodward. Y. M. C. A. Building, Grand River and Griswold.

#### The Charities of Detroit.

The principal public and other charities of the city are as follow:

Association of Charities, 10 Merrill Block. Bethel Home, Griswold and Atwater.

Casino Tabernacle, Griswold, opposite High School.

Children's Free Hospital.
Contagious Disease Hospital, Crawfor Road, north of city limits.
Day Nursery and Kindergarten, 55 Church.
Detroit Sanitarium, 250 Fort West. Hospital, Crawford

Emergency Hospital and Free Dispensary, Michigan Ave. and Second.

Free Eye and Ear Clinic, Room 8, Market Building.

Fruit and Flower Mission.

G. A. R. Relief Corps. Good-will Society

Grace Hospital, (homœopathic), Willis Ave. and John R.

Harper Hospital, head of Martin Place, near Woodward Ave

Helping Hand Society. Home for Boys, 311 Cass Ave.

Home of Industry, for discharged convicts, 641 Beaubien.

Protestant Orphan Asylum, 988 Jefferson. Home for the Aged Poor, Dequindre and Scott.

Home of the Friendless, for orphans, War-ren Ave., near Woodward.

House of Providence, Infant Asylum and Lying-in Hospital, St. Antoine and Elizabeth. Industrial School, Grand River and Wash-

ington Aves. Ladies' Society, for Hebrew Widows and

Lutheran Deaf and Dumb Asylum, Norris,

near city Open Door, for fallen women, 223 Park.

St. Anthony's Male Orphan Asylum, Gratiot Ave., near city.
St. Joseph's Retreat for the Insane, Dear-

born, near city.
St. Luke's Hospital, Church Home and Orblange, McKinstry Ave. and Fort west. St. Mary's Free Eye and Ear Infirmary, Cinton, near St. Antoine.

St. Mary's Hospital, St. Antoine, near Gra-

tiot Ave.
St. Vincent's Female Orphan Asylum, Mc-Thompson Home for Old Ladies, Hancock

and Cass Aves.
United States Marine Hospital, Jefferson and

Mt. Elliott Aves.
Willow Lawn, private hospital for women,

Woman's Christian Association

Woman's Hospital and Foundlings' Home, Thirteenth, two blocks south of Grand River. Working-woman's Home, Adams Ave. and Clifford.

Young Woman's Home.
Zoar Orphan Asylum and Home for the Aged, end of Harvey Ave., Springwells.

Belle Isle Park, the only public breathing-place of size yet owned by the city of Detroit, is on an island, as the name implies, the uppermost of the fine series of islets in the Detroit River, and the one nearest its beginning at Lake St. Clair. The size of this tract is not quite correctly stated in a previous article on parks in this volume (page 39), being actually 670 acres, though commonly stated at a round 700. This beautiful and fertile spot has been variously known in history as Hog and Rattlesnake Island, and by other names, and is said to have received its present name about forty years ago, in honor of Miss Belle Cass, daughter of Gen. Lewis Cass. Its general elevation above the nean level of the river is seven feet, and it is finely shaded by natural growths of hickory, elm, oak, and other forest trees. It was bought by the city, a few years ago, for \$200-000, and a large sum has since been expended upon it under the direction of the Park Commission.

THE Boulevards are still in course of construction. They are to have a total length of about nine miles, with a uniform width of 150 feet, having a 75-foot dimension in the middle.

# Record for 1888.

#### Miscellaneous Events.

DECEMBER.-(1887.)

 Strobridge Lithographing Co.'s building burned at Cincinnati; loss, \$200,000.—Earthquake shock at Chorley, Lancaster, England.
3.—Marie Francois Sadi-Carnot elected
President of the French Republic, vice Jules
Grévy, resigned.—Earthquales in Calabria.

British steamer Lorne wrecked on east

coast of Island of Hainan.

6.—Don M. Dickinson nominated Post-master-General.—President Cleveland's Free Trade message read to Congress.—Mayor Chamberlain, of Detroit, vetoed resolution for three years' contract with Brush Electric

Light Co., for public lighting.—Collision on Chicago and Grand Trunk, near Port Huron. 8.—Johann Most sent to N. Y. Penitentiary for one year.—Richard Stours Willis chosen Public Library Commissioner at Detroit.— Seventy vessels wrecked in a three days' storm in the West Indies; tidal wave at Bara-

9.—Train on St. Louis, Arkansas and Texas Railroad stopped and robbed by three masked

men, ten miles north of Texarkana.

men, ten mies north of Texarianas.

10.—Navigation still open at Cheboygan.—
Welland Canal closed.—Pennypacker's barrelfactory burned at Philadelphia; loss, \$100,000.

Jules Ferry shot at and wounded by Berckein Aubertin, a crazy radical pamphleteer.—
Canada Canada Chemen Passidant of the Bal-Samuel Spencer chosen President of the Baltimore and Ohio Railroad in place of Robert Garrett.-Dr. Erichsen's crematorium at Detroit, used for the first time in burning the body of Mrs. Barbara Schorr, of Millersburg, O. 12.—Edward L. Harper, President of the Fidelity Bank at Cincinnati, sent to the peni-

tentiary for ten years for criminal use of deposits.—Eugene Converse, lawyer, of Battle Creek, sent to State Prison for five years for embezzlement.—Mrs. John S. Newberry's

house robbed, at Detroit.

13.—Dr. and Mrs. J. B. Book divorced at Detroit by Judge Look one day after bill filed,

Paper money panic in Peru.
 Sylvanus Daniels confesses to the mur-

der of farmer Jerry White, near Flint. 17.—Frederick K. Stearns resigns presidency of Detroit Base Ball Club.-Accident on Intercolonial railway, New Brunswick; eight men killed.—Heavy gale along the New England coast.-Cyclone at Forts Washita and Green, Idaho; five persons killed.
19.—S. S. Crandall, lawyer, shot his wife,

her mother, his step-daughter and himself at Ballston Spa, N. Y.

20.—Severe blizzard in Kansas and Dakota, Naphtha explosion at Rochester, N. Y., killing three men and destroying property worth \$300,000.

28.—Strike of a thousand coal and freight handlers, employed by the Philadelphia &

Reading railroad company

25.—President Cleveland gives Pope Leo XIII. an elegantly engrossed copy of the Constitution of the United States, bound in cream vellum.—U. S. steamer Enterprise reports the breaking up of Leary's great raft, abandoned off Nantucket shoals.—Wakefield, a village in the Upper Peninsula of Michigan, burned; loss \$100,000.

26.-Dr. Harrison becomes premier of Manitoba.

27.—Mrs. Henry Gauer found dying of a bullet wound, at her home in Detroit.

28.-High wave at Portland, Me., 60 feet

above high water mark.

C. H. Smith chosen President of the Detroit Base Ball Club.

31.—Collision on the New York, Pennsylvania & Ohio, near Meadville, Pa.; five killed.

—Collision on the Cincinnati Southern, near
Somerset, Ky.; six killed.—Collision on Utah & Northwestern, near Dillon, Mont.; one killed.

—Train telescoped on Chicago & Atlantic road, near Kouts, Ind.; brakeman killed.—Severe blizzard in Minnesota, Iowa and Wisconsin, and in Chicago.-Emanuel Presbyterian church burned at Milwaukee; loss \$100,000.

#### JANUARY.-(1888.)

1.—Quebec Seminary Chapel burned, with paintings worth \$500,000.

3.—Capt. Ira Holt robbed on Park street, in

Detroit, early in the evening.

4.—Hurricane in the Irish channel.—Collision on a trestle on the Canadian Pacific, near Schrieber; 17 killed —Collision of express Schieber; I kined Collision of express trains on the Dutch State railway, near Me apple, Holland; 26 killed. 5.—Mackinac Straits frozen over.—Bernal

the Mexican bandit, killed in a fight with troops, near Cosala.

6. - Navigation building, Brooklyn navy yard, burned; loss \$200,000. 7.-L. Q. C. Lamar, Secretary of the In-

terior, resigns. 8 -Light Infantry Armory burned at De-

troit.—Emigrant cars telescoped near Edson

Station, Wy. T.; two killed.

10. — Railway accident near Haverbill.

Mass.; 12 killed.—Train on Mexican Central stopped by eight men and robbed .- Emigrant train ran down a grade on the Southern Pa-

cific, near Sumner, Cal.

11.—Coach jumped track on Atlantic & Pacific, near Coolidge, N. M.—Earthquake

shocks at Ottawn.

12.—Earthquake shock in the Carolinas. Terrible blizzard, stopping trains in the Northwest and causing great loss of life; 235 persons frozen to death.—Fourteenth Regiment Arfrozen to death.—Fourteenth Regiment armory burned at Columbus, with 300 dogs on exhibition there.—Armory at Lowell, Mass. burned, 20,000 cartridges exploding.—Residence and valuable library of Senator Ingalis. of Kansas, burned.—Knights Templars ball at Detroit.—Gen Edward S. Bragg, of Wisconsin. confirmed as Minister to Mexico.

13.—Harrison Ministry in Manitoba resigns

and the Liberals come in.—Fire at Paw Paw.

Mich.; loss, \$80,000.

Fire at Indianapolis; loss \$708,000. Explosion of natural gas at Findlay, O.— Bloody neighborhood quarrel in progress at Pikeville, Ky.—Decline in petroleum.

15.—Universalist church burned at Minne-

apolis; loss \$80,000.

16.—L. Q. C. Lamar confirmed as justice of National Supreme Court.

17.—Train wrecked by broken rail on Labe Erie & Western, near Bluffton, O., 1 killed.— Michigan Carbon Works at Detroit having lest \$50,000 arrests its treasurer

18.—Graham, Liberal M. P., and Burns. Socialist, imprisoned for the disturbances of Nov. 13, 1887, in Trafalgar square,—Pig iron declines \$4 per ton.

19.—Unsuccessful attempt to stop and rob

19.—Unsuccessin attempt to stop and root a train at Cooley's Lake, Missouri.
23.—Fire at Philadelphia; loss \$1,500,000.—Hanging at the Tombs of Dan. Driscoll, leader of the Whyo gang, for murder.
24.—Explosion in the Wellington collierts:

at Victoria, B. C.; 72 killed.—Mob at Guaya-quil sacks the bishop's residence. 25.—Explosion in Metallic Cap factory near Huntington Valley Station, Pa. 1 killed.—Mr. Blaine writes from Florence that his name will not be presented for the next Presidential nomination.

26.-Detroit Light Guard reception to Gov. Luce. -Very heavy snow storm in the Eastern

States.

27.-Ice palace festivities at St. Paul, and fatal accident at the starting of a new cable line there.—The Central Bank of Canada at Toronto, having been wrecked, the Federal

Bank decides to wind up.

28.—Naphtha explosions at Binghampton, N.Y.—Train wrecked by broken rail on De-troit, Grand Haven & Milwaukee road near Durand.—The "White Caps" give a wife de-serter 50 lashes on his bare back near Boston, Ind.—Lunar eclipse visible in U. S.

29.—Freight train on Lake Shore & Michigan Southern road fell through bridge near Pine Station, Ind., and brakeman crushed. 30.—Fire in Broadway, New York City;

loss \$1,500,000.

31.—Kentucky General Assembly by 48 to 6 protested against Blair educational bill. Divorce of Sarah Althea Hill from Senator Sharon, of California.

#### FEBRUARY.

1.—Barnes, Hengerer & Co.'s dry goods store, Buffalo, burned; loss \$1,200,000.—1200 bales of cotton burned at Charleston; loss \$100,000.

Earthquake shocks in Scotch highlands. -Palms will sustained in Michigan Supreme

Court. 3.—Riot among the Reading strikers at Shenandoah, Pa.—"Old Buckskin,"the horse that carried Lieut. L. B. Raker in pursuit of the assassin Booth, died at Lansing.

4.-Fight at Pittsburgh between strikers

4.—Fight at Pittsburgh between strikers and non-union men.—Rioting among striking miners at Hueloa, Spain, suppressed by troops.
5.—Train derailed on N. Y., Penn. & Ohio ear Salamanca, N. Y.; 3 killed.
6.—Burning of Geo. D. Hill's house near Bolivar, N. Y., with his wife and two children; natural gas the supposed cause.—Metropolitan National Bank of Cincinnati suspended and its president arrested.—Senator Riddleberger attempts to discuss the extradition treaty with England in onen session. England in open session.

7.—Fatal explosion of natural gas at Ander-

on, Ind.

8.-Violent snow storms in Austria and Furkey; three feet of snow in Constantinople. Furkey; three reet or snow in Constantinopie.

—Fatal accident on cable tramway at Kansas

Ity.—Millionaire Amos J. Snell murdered at

Chicago.—Second annual meeting of Amerian Newspaper Publishers' Association at
indianapolis.

10.—Explosion in powder mill at Wapawallopen, Pa.; 4 killed.

11.—Administrator-Bishop Joos at Detroit
refuses to admit the Kosciusko Guard in uni-

efuses to admit the Kosciusko Guard in uniform to the celebration of mass in St. Patick's Church

12.—Socialists meet in Trafalgar square. 13.—Business block burned at St. Paul; loss B50,000.

14.-Street car in Brooklyn crushed by a

lerrick; 3 killed. 15.—Fisheries Commission agree reaty.—Great fires in Providence (loss \$350,-100) and in Elmira (loss \$185,000).—Blair edu-mational bill passed the Senate a second time,

9 to 29.

16.—Collision on the Grand Trunk near Ramiton; 3 killed.—Copper train of 30 cars was wild for five miles down grade at Mar-

17.—Reading Coal & Iron Co. strike ends.
18.—Raoul Pictet Co. enjoined at Detroitfrom making Pictet fluid.
19.—Mt. Vernon, Ill., struck by a cyclone; many killed.—Memorial of Milton presented by Geo. W. Childs, of Philadelphia, to St. Margaret's Church, Westminster, unveiled, Archdeacon Farrar officiating.
20.—Severe freshet in Palmer Mass, and

20.—Severe freshet in Palmer, Mass., and

ice gorges at Gilbertville and Chicopee.

21.—Failure of Graff, Bennett & Co., of Pittsburgh, iron manufacturers.—President Cleveland and wife visit Florida.—Detroit Club's first annual art exhibition.

22.—Michigan club's banquet at Detroit in honor of Washington's birthday; speeches by Gens. Hawley and Harrison and by Wm. Mc-Kinley.—Dynamite explosion at Duluth in blasting; 4 killed.

26.—Fire in Buffalo; loss \$250,000.—Strike ordered on the Chicago, Burlington & Quincy

railroad system.

27.—Explosion of a ferry boat at South Vallejo, Cal.; 30 killed. 29.—Severe snow storms in Northern Italy, and destructive avalanches in Switzerland and Spain.—Three men rob a passenger train on the Cotton Belt railroad at Kingsland, Ark.

#### MARCH.

1.—The Mills bill for cutting down the tariff made public.—Daniel Wilson, son-in-law of exmade public.—Daniel Wilson, son-in-law of ex-President Grevy of France, convicted of deal-ing in Legion of Honor decorations and sen-tenced to two years' imprisonment, five years' loss of civil rights and a fine of \$600.—Burning-of Potter & Stymus' furniture factory in New York; loss \$1,000,000.—Manistee Salt & Lum-ber Co. assigned; liabilities \$804,000. 2.—Barnes Bros.' nancer warehouse humad

2.—Barnes Bros. paper warehouse burned, at Detroit; loss \$141,000.

3.—Fernecke's candy factory, etc., burned, at Milwaukee; loss \$200,000.

5.—Dynamite explosion in mine at Ishpe-

ming; 5 killed.
6.—Corner in petroleum on the New York stock exchange

7.—The Evening Union office at Springfield, Mass., burned; 6 killed.—John Bright de-nounces Gladstone and his Irish policy.

8.—Dependent pension bill passed the Sen-

5.—Dependent pension our passed the Senate, 4t to 16.

10.—American officers pursuing train robbers into Mexico, arrested there.

12.—Terrific blizzard in New York city; wind 64 miles an hour; thermometer at 4; snow drifts almost impassable; travel stopped.

snow drifts almost impassable; travel stopped.
—Collision on the Pennsylvania railroad, near
Huntingdon; 3 killed.

13.—Buckeye Buggy Co.'s building burned
at Columbus; loss \$20,000.

15.—Brotherhood of Locomotive Engineers
and Firemen tie up the Atchison, Topeka &
Sante Fe system.—Crown Prince Oscar, of
Sweden, marries Miss Ebba Munck, a maid of
honor.—Fires in Milwaukee (loss \$425,000 and
several lives) and in Philadelphia(loss \$250,000).

16.—Chief Arthur, of the Locomotive En-

To—Chief Arthur, of the Locomotive Engineers, repudiates the strike on the Atchison, Topeka & Sante Fe.—Snow plow jumped the track at Sharon, N. Y.; 4 killed.—Train thrown off the track of the Delaware, Lackawanna & Western, at Tracy's Bridge, by a spreading rail; David Gray, formerly a Buffalo editor, was killed.

17.—Wasternia description.

17.—Fast train drops through a trestle near Waycross, Ga.; 25 killed. ' 18.—Atchison, Topeka & Sante Fe strike

stopped.

19.—Bell telephone case decided for Bell by

U. S. Supreme Court, three judges dissenting. 20.—State Treasurer Tate, of Kentucky, absconds and is suspended by Gov. Buckner.—Fire in a theater at Oporto; 80 killed.—De-

structive cyclone in Georgia and East Ten-

24.—Dispute between Gen. Badeau and the Grant family over the former's claim for compensation for helping Gen. Grant in the preparation of his Personal Memoirs.-Ninnescah, Kan., wrecked by a tornado.

26.—International Council of Women held Washington.-Daniel Wilson, President Grevy's son-in-law, released by French court of appeals.-President Cleveland pardons Wm.

ewson, convicted of polygamy.

27.-Policeman shot and burglar caught on Charlotte avenue, Detroit.-Alarm for the safety of the African explorer, Stanley. 29.—Explosion in the coal mine at Rich

Hill, Mo.; 21 killed.
31.—Benj, E. Hopkins, assistant cashier of the Fidelity Bank, at Cincinnati, sent to penitentiary for seven years.

1.—Residence of William Walter Phelps burned at Englewood, N. J.—Fire and panic at a bull fight at Celaya, Mex.; 18 killed.

 Fatal affray on election day at Lima, O., between Irish and negroes.—Oil tank at Emlinton, Pa., containing 7000 barrels, struck by lightning and the oil set on fire.

3.—Floquet, the French premier, forms a cabinet.—Rosetti forms a cabinet for Rou-

mania.

4.—The boycott on the Chicago, Burlington

& Quincy ends.

5.—Centennial celebration at Marietta, O. begins.-Train on Milwaukee and St. Paul fell through a bridge near New Hampton, Ia.; 6
killed.—Maj.-Gen. Alfred H. Terry placed on
the retired list.—Serious fire at Vassar, Mich.
—Fire at Amesbury, Mass.; loss \$1,000,000.—
Rock Falls, Ia., flooded by a freshet.

8.—Gen. Boulanger elected to the French

chamber of deputies.

9.—Leading citizens of Montreal help clean the streets.—Dave Walker, chief of the bald-knobbers, tried at Ozark, Mo.

11.—Mme. Diss DeBar arrested in New York for imposing upon the old lawyer, Luther Marsh.—Subsidence of the Chicago, Burlington & Quincy strike,-Attempt to wreck a passenger train on that road. 12.—Brewers' strike inChicago.

16.-Breweries in New York and neighboring cities lock out the men.

Hotel Cadillac opened at Detroit.

19.—Peasant revolt in Roumania subsiding.
—Explosion in St. Helena colliery, Workington, England; 17 killed.—The Bethel Home at St Louis burned, with several inmates, ate passes a bill for the admission of Southern Dakota as a State, 26 to 23.

24.—Defalcation of State Treasurer Tate, of Kentucky, found to be \$230,000.-Mayor Hewitt, of New York, refuses to let the Irish flag
fly from the City Hall on St. Patrick's day.
25.—Failure of Metcalf Bros., dry goods,

Detroit. for \$308,000. 27.—Pope Leo XIII. condemns the Nation-

alists' plan of campaign in Ireland.

Breaking down of the floor of a public hall at Rushylvania, O., during a school exhibition; 2 killed.—The "Ticonderoga," in which Farragut went around the world, burned in Boston Harbor.—Moses W. Field resigns chair. manship of Michigan Greenback State Central Committee

30.—Melville W. Fuller, of Chicago, nominated Chief Justice of U.S.—Forest fires in the Kane oil field, Pennsylvania.—Seventythree saloonists arrested in Cincinnati for not closing on Sunday.-Panic caused by cry of fire among spectators of a menagerie at Prague; 6 killed.—Dr. Charles E. Simmons. Mr. Tiden's physician, sues the Tilden estate for fees amounting to \$140,000.

1.—Bitter debate in the Senate between Voorhees, of Indiana, and Ingalls, of Kansas 3.—Strike among coal-miners at Quaregnon, Belgium.—Chicago, Burlington & Quincy pas-senger train maliciously wrecked and the con-ductor besten. Hurbes Bros. of Toronto. ductor beaten.—Hughes Bros., of Toronto, fail for \$370,000.—Failure at Xenia, O., of Hooven & Allison and of M. C. Allison, who died the same day.—Chippewa Lumber Co. 8 yard, at Big Rapids, burned: loss \$150,000.

-Falvey & Reilly's gambling den raided

by the Detroit police.
5.—Methodist General Conference refuses to admit women as lay delegates.-Leading Detroit vessel men protest against bridging the river.—Carload of dynamite exploded on the Philadelphia & Reading, at Locust Gap; 7 killed

7.—Wm. T. Coleman & Co., commission house, at San Francisco, fail for \$2,000,000.

8.—Garbage burning resolution passed over Mayor Pridgeon's veto, at Detroit. 10.—Eighteen miners killed by falling rock at Stassfult, Saxony -St. Paul's church, Buffalo, destroyed by explosion of natural gas.— Gov. Luce removes the quarantine against

Cook county (Ill.) stock.

12.—Lightning struck a tank containing about 15,000 barrels of oil, near Oil City, Pena.

Overflows and inundations along the Missis-

sippi and Red River.

13.—Fire in Disston's saw works at Tacony.

Penn.; loss \$300,000.

14.—Train wrecked at Fountain, Col., exploding 17,000 pounds of giant powder, destroy-

ing the town and killing 5.

15.—Mississippi 19 or 20 feet above low-water mark.—National convention of Equal Rights, at Des Moines, nominate Belva Lock-wood and Alfred Love for President and Vice-President.

16.-Union Labor convention, at Cincinnati, nominate Streeter and Cunningham for President and Vice-President.—New South

Wales restricts Chinese immigration.

19.—Michigan Local Option Law held invalid.—White Caps, after whipping a wifebeater near Evansville, Ind., drive him awar 23.—Drs. J. H. Vincent, J. H. Fitzgerald and J. W. Joyce chosen Methodist bishops.

24.—Corner stone of Divinity building on ew Catholic University of America laid washington; President and cabinet present.—Prince Henry of Prussia married to Princes.

Irene of Hesse. 25.—J. M. Thoburn chosen Methodist mis-

sionary bishop to India.

26.—Explosion at Montreal of reservoir at gas works; 10 killed. 27. — Dr. Lyman Abbott succeeds Mr.

Beecher as pastor of Plymouth church. 28.—Gasoline explosion at Frederick, Md.;

2 killed, many injured.
30.—Decoration Day.—Michigan Press Association meet at Detroit.

31. - Prohibitionists nominate Fisk and Brooks for National ticket.

### JUNE.

1.—Lynching of a murderer at Viroqua, Wis.—Mrs. S. W. Rawson shoots her husband's solicitor in court at Chicago.—Boiler explosion in the rolling mills at Wyandotte, Mich.; killed.

4.—Mundine Hotel, Rockdale, Tex., burned

with 11 inmates

revisits Detroit.

5.—Great fire in Hull, Ont.
6.—President Cleveland renominated by the Democratic National Convention at St. Louis 7.—Ex-Senator Allen G. Thurman nominated for Vice-President by the Democrats.—Father Kolasinski, the deposed Polish priest 8.—Murderous attempt to rob an express an on the Cincinnati, Indianapolis, St. Louis Chicago railway near Delhi, 0.—2721 immi-rants arrive at Castle Garden.

78. Fire in Cincinnati destroying buildings of Tennessee Lumber Co., Mill Creek Distilling Co., etc.; loss \$200,000.—Norway; Mich., burnet loss \$220,000.

11.—Henry Muenchthaler, a Bavarian, kills his wife Louisa and himself at Detroit.

13.—Locusts appearing in Iowa and Illinois. Forest fires in Nova Scotia destroy East

Rawdon. Rawdon.

14.—Spanish Cabinet reorganized under Sagasta.—Weddings at Mentor, O., of Harry Garfield to Miss Belle Mason, of Cleveland, and of Miss Mary Garfield to J. Stanley Brown.

16.—Gasoline explodes in Zanesville, wrecking a large brick warehouse and killing a man.—Express train on Northern Pacific boarded by train robbers in Montana and passengers

plundered.

18.—Seven hundred people drowned by floods in Mexico.—Dubols, Penn., nearly destroyed by fire.—Michigan State Medical Society in session at Detroit.

21.—National Electric Medical and Surgical

Association in session at Detroit.

23.—Many fatal prostrations in New York, Pittsburgh and Cincinnati from excessive heat. 25.—Gen. Benj. Harrison and Hon. Levi P. Morton nominated by the Republican National

Convention at Chicago for President and Vice-President.

27.—President Cleveland confers degrees at the University of Virginia on commencement day 29.—Amalgamated Iron Workers strike at Pittsburgh.—Duke of Marlborough and Mrs. Lily Warren Hammersley married by Mayor

Hewitt at New York.
30.—Twenty Wisconsin and New Jersey monuments dedicated at Gettysburg.—Two U.
8. marshals killed by desperadoes in the Indian

Territory.

JIII.V.

1.—Centennial Exposition opens at Cin-

3.—O'Donnell's libel suit against the London Times decided for the Times.—Seligman Bros. & Cb.. clock dealers, New York, failed for \$240,000.—The "Harlem," steel steamer, 304 feet long, \$500 tons, launched at Wyandotte, Mich.

4.—Pan-Presbyterian Council at London, Lord Cairns presiding.—Great exposition opened at Cincinnati.—Cyclone in Iowa for 100 miles.

5.—Opening of "The Utopia," the first apartment house in Detroit.

6.—Collision on the Pennsylvania railroad near Nanticoke, caused by a train dispatcher's blunder; 30 injured.—Boilers of Allegheny City tannery explode; 6 injured. 9.—Heavy rains from Kansas eastward. 10.—Saturday meetings in Trafalgar square

forbidden.

11.-Two hundred and four houses burned

in Alpena.

12.—Resignation announced of G. V. N. Lothrop, minister to Russia.—Annual encampment of State troops on Mackinac Island.—Train on Virginia Midland through a trestle near Orange Court House.

13.—Gen. Boulanger hurt in a duel with Premier Floquet.—Milan of Servia deprives his queen, Natalie, of the custody of their child, the Crown Prince Alexander.—Heat 104° in the shade at Athens.

15.—Volcanic eruption at Bandaisan, Japan;

يستندن فالمتعاد

reat loss of life.

16.—National Prison Association in session

Boston.—Vault in the county clerk's office at Detroit wrecked by an explosion.

-Cloudburst and flood at Wheeling, W. Va.; 11 drowned.—Wellington R. Burt nominated for Governor by Democratic State Con-

vention at Detroit.

20.—Failure of Chas. R. Richardson, boot and shoe dealer, at Detroit.—The new Emperor of Germany visits St. Petersburg.

21.—Mills tariff bill passed the House, 162

to 149.

22.—Total eclipse of the moon visible in the U. S.—Collision on the Norfolk & Western near Lynchburg, Va.; 10 killed.—Coal mining town of Roslyn, Wyoming, burned.
24.—Detroit Base Ball Club at the head of

the League for a fleeting moment.—Launch at The Joggins, N. S., of a lumber raft containing 22,000 piecs.—Krippendorff, Dittman & Co.'s shoe factory burned at Cincinnati; loss \$300,-

31.—Francis Adams and Frederick L. Seitz resign from the Detroit Park Board.

AUGUST.

8.—Blinky Morgan, murderer, hung at Columbus, O.—Crowded tenement burned in New York, with 15 inmates. Forest fires near Ottawa.

Bishop Samuel S. Harris stricken with paralysis at London.

6.—Strikers burn and plunder at Amiens, France.—Fifth national convention at Detroit of the Brotherhood of Carpenters and Joiners of America.

7.-Prof. Brooks, of Harvard, discovers a comet.

8.—Republican State Convention met at Detroit.

9.-Yellow fever breaks out at Jacksonville. -Great fire at Chattanooga; 5 killed.

10.—Mr. Blaine returns from Europe and is publicly welcomed.—Hugh Maxwell Brooks, alias Maxwell, hung at St. Louis for murder of Preller.

14.—Discovery of heavy and long continued mail robberies in Chicago.—The Geiser sunk off Sable Island by the Thingvalla; 117 drowned.

16.—Woman suffrage law held unconstitutional in Washington Territory.

18.—Brotherhood of Locomotive Engineers meet at Detroit.

19.—Unsuccessful attempt to rob a train on the Union Pacific, in Wyoming. 20.—Cyclone at Marquette doing great

damage

21.—Nat Kinney, organizer of the Bald-knobbers, shot at Ozark, Mo.—Fisheries treaty rejected by the Senate, 30 to 27. 22.—City of Chester sunk by the Oceanic in

San Francisco Bay; 34 drowned Packing house destroyed by cyclone at Still Pond, Md.; 9 inmates crushed.—Schuylkill river 14 feet above ordinary water mark.—Paper mill burned at Neenah, Wis.; 14 spectators killed by falling walls.

23.—President Cleveland's retaliation mes-

sage read to the Senate. 27.—Manager W. H. Watkins, of the Detroit.

Base Ball team, resigns and is succeeded by Robt. H. Leadley.

SEPTEMBER.
1.—Reception at Detroit to Minister Lothrop.—Opening of the new Art Museum.

3.—American Association of Pharmacists meet at Detroit.—Sarah Althea Hill and her husband, Judge Terry, make a violent disturbance in the federal court-room at San Francisco.—Labor Day; parade of workmen in the large cities.

4.—Vermont goes Republican by 28,000.— Destructive cyclone in Cuba; great loss of life and property.—Michigan State Pharmaceu-tical Association meets at Detroit.—Sixtysecond annual convention of Michigan Baptists opens at Detroit.

10.—Train on New York, Pennsylvania & Ohio road, carrying veterans to the National encampment, wrecked at Rittman, O.; 7 killed.
11.—Marriage, at Turin, of the Duke of Aosta to his niece, the Princess Lettita Bonaparte.-Maine goes Republican by 18,055 -Reunion of the Grand Army of the Republic, at Columbus.—Mayor Pridgeon, of Detroit, ve-toes the Snow-Talbot street railway franchise.

14.—Train on Baltimore & Ohio, full of veterans from the National encampment, wrecked

at Ankneytown, O.; 2 killed. Explosion in a Cleveland flouring mill;

2 killed.

 Congress of American physicians and surgeons at Washington.
 American Athletic Union at Detroit.
 Gen. John G. Parkhurst, of Coldwater, made minister to Belgium.-B. H. Hutchinson,

Chicago, speculator, forces a corner in wheat and sends the price up to \$1,50.

Small-pox at Buffalo.
 More Whitechapel murders in London.

#### OCTOBER.

1 .- Excitement in Germany over the publication of passages from Emperor Frederick's

3.—Levi P. Morton's letter of acceptance appears,-Senate's substitute for the Mills bill reported.—Emperor of Germany visits Francis

Joseph of Austria.
4.—Marriage of Miss Anne, daughter of ex-Minister Lothrop, to Baron Berthold Theodore Hermann Hoyningen-Huene, of Russia.

 Collision on the Rome, Watertown & Ogdensburg road, near Hannibal Station; engineer killed.—Fishing schooner Madeline run down by the steamer Queen, off Newfoundland Banks; 21 drowned

9 .- Rioting in Chicago by the street car

strikers.

10.—Collision on the Lebigh Valley road, near Penn Haven. Pa.; 57 killed.—Temporary amphitheater breaks down at Quincy, Ill.; many injured.

12.—The German Emperor visits the Pope.

14.—Publication of Judge Thurman's letter accepting the Vice-Presidential nomination. 15.—Dr. Morrill Mackenzie's book about the

late Emperor Frederick seized by the German

police.

16.-Collision on the Lehigh Valley road, from failure to signal; 7 killed.—Boiler ex-ploded in Cornwell's paper mill, near Ypsi-lanti; 1 killed.—Non-union cardrivers assaulted at Chicago by strikers.—Postmaster General Dickinson and Secretary Vilas approve the plan for the public building at Detroit

17.—Thos. B. Barry, agitator, expelled from the Knights of Labor.

18.-Collision on the Cumberland Valley road, near Shippensburg, Pa.; baggage agent killed.—Failure of Nathan Corwith & Co., heavy dealers in lead, Chicago; liabilities said

to be \$2,000,000.

19.—Two railroad paymasters shot from ambush and robbed of \$12,000.—Cannon ball express on the Baltimore & Ohio road went

over a trestle near Washington, Pa.

20.—Congress adjourned, after sitting 321 days.—Excursion train from Naples crushed by a fall of rock; 90 killed.—Marriage of Elizabeth Stuart Phelps to Rev. H. D. Ward. of the Independent.

22.—Parnell commission begins its sittings. 23.—Steamship Atlas sunk by a ferry-boat

23.—Steamship Atlas sunk by a terry-boat in a fog within 500 yards of the wharf at New York.—Thomas Axworthy, city treasurer of Cleveland, defaults for \$400.000 and disappears. 25.—Publication of a letter by the British minister, Lord Sackville West, in favor of President Cleveland.—Daniel Hand, of Guilford Congress 21.000006 for the education ford, Conn., gives \$1,000,000 for the education

of negroes in the South. Rescission of the decree forbidding the sale of Dr. Mackenzie's book in Germany.—Mysterious disappearance

book in Germany.—Mysterious disappearance of Gen. Henry B. Clitz from Detroit.

30.—Yacht race in Detroit river.—The British minister's recall requested.—Natural gas explosion at Lima, O.—Gen. Badeau discontinues his suit against the Grants.

#### NOVEMBER.

2.—Boiler of threshing-machine explodes in Bern township, Berks county, Pa.; 6 persons killed.

3.—Explosion in a coal mine in Clinton county, Pa.; 16 killed.—Explosion in the Campagnac coal pit, department of Aveyron, France; 80 killed.—Steamer Sax Mundham sunk by the Nor. off Cowes: 22 lives lost.

4.—John S. Foley consecrated at Baltimore, Catholic bishop of Detroit.

6.—Election Day.—Trouble in Samoa, between the Americans and Fradish and the

tween the Americans and English and the Germans.

9.—Driving snow storm in Kansas and Missouri.-Another Whitechapel murder.-Steve Brodie, the bridge jumper, jumped 212 feet from Poughkeepsie bridge into the Hudson and was seriously hurt.—Explosion in a coal mine, near Pittsburg, Kas.; 90 killed.—Fire in the Steam Gauge & Lantern works, Rochester, W. V. Stilled on religious. N. Y.; 21 killed or missing. 10.—The Umbria collides with the Iberia

after passing Sandy Hook.

12.—Gen. Sir Chas. Warren, superintendent

of the London Metropolitan police, resigns
14.—Nineteenth annual meeting of
National Board of Trade at Chicago.—F National Board of Frader at Chicago.—Fire damp explosion in the Frederick pit at Dour, province of Hainault, Belgium; 82 killed.— Switch accident on the Baltimore & Ohio; 7 killed.—Bald-knobbers lynch five witnesses against them.—Woman's Congress at Detroit.

15.—Six establishments fail at Durham, N.

C. liabilities \$741.00.—Statue of Secretary.
Seward unveiled at Auburn.—Marriage of Joseph Chamberlain to Miss Mary, daughter of Judge Wm. C. Endicott, secretary of war.

—Annual convention of Christian Workers at

Detroit.

Detroit.

16.—Lindauer Bros., wholesale clothiers, Chicago, fail for \$181,652.

17.—Twenty-two tramps disturb the peace at Indian Orchard, Mass.—Keely, the motor inventor, put in Moyamensing prison for contempt in not disclosing the nature of his in vention.

21.—Edward Harrington, Irish agitator fined £500 for contempt by the Parnell com-

mission.

mission.

22.—Acolytes strike in the ritualistic Episcopal Church of the Ascension, Chicago.

23.—Reception to Bishop Foley, at Detroit.

Knights of Labor convention at Indianapolis re-elect Powderly Master Workman.—Bedell, real estate clerk for New York law firm, pleads guilty of forging mortgages, and is sentenced to State's prison for 25/5 years.

24.—Marine disasters in the lower St. Law-

rence, caused by cold and storm.

25.—News of the foundering of the New.

burg, of Leith, in the North Sea; 16 drowned. Heavy snow storm in the Eastern States. 26.—Patrolman Albert W. Thayer shot and

killed at Detroit.

27.—Steamer Allentown lost in storm off Cohassett, Mass., with every soul on board—18.
29. — Thanksgiving Day. — University of Michigan foot-ball players beaten at Chicago by a team made up from Chicago. Yale, Harvard and Princeton.—Johns Hopkins foot-ball

30.—Anarchist circular distributed in Chicago.—The great Calumet & Hecla mine agai

burning; 8 miners missing.

#### The Death-roll of the Year.

#### DECEMBER (1887).

1.—Dr. Ezra C. Adams of Plainwell, Mich., aged 64.—Gen. Wm. H. Emory, U. S. A., at Washington, aged 75.

3.-Dr. Daniel McGettigan, primate of Ire-

3.—Dr. Daniel McGettigan, primate of fre-land, aged 72.

4.—Gen. Samuel I. Hunt, at Morristown, N. J., aged 94.—Phillippe Rousseau, still-life painter, at Acquigny, Belgium, aged 71.—Al-gernon I. Sullivan, eminent lawyer, at New York, aged 60.

5.—Richard Bickerton Pemell (Lord Lyons), Pritish discounts aged 70.

5.—Richard Bekerton Felhen (Lord Lyons), British diplomat, aged 70.
6.—Francis Baker, aged 82, killed by the cars at Holly, Mich.—Sir Bryan Robinson, late Chief Justice of Newfoundland, at London, aged 79.
7.—Lunes C. Brevoort, at Brooklyn, aged 69.

7.—James C. Brevoort, at Brooklyn, aged 69.
9.—Benj. Rush Plumley, early abolitionist, died at Galveston, aged 77.
12.—Mrs. John Jacob Astor, at New York,

aged 61.—Sir George Burroughs, physician in ordinary to the Queen, at London, aged 86.— Maj. Wm. O'Callahan, founder of the Montgomery Rifles, at Detroit. aged 80.
14.—Gen. Thos. Kilby Smith, at New York,

aged 67.

aged 67.

15.—Gov. Joseph R. Bodwell, of Maine, at Hallowell, aged 69.

16.—John C. Holmes, late President of State Pioneer Society, at Detroit, aged 78.

17.—Dr. Arthur Farre, physician extraordinary to the Queen, in London, aged 77.—Mme. Debbie Clemelli (Mrs. Frank Folsom), at Detroit, of malarial feves.—Rev. Alex. H. Mackonochie, leading Ritualist, frozen to Mackonochie, leading Ritualist, frozen to death near Loch Leven, Scotland.—Sterling P. Rounds, formerly Public Printer, at Omaha, of pneumonia.

of pneumonia.

18.—John D. Canfield, Circuit Court Commissioner, at Detroit, aged 25, of consumption.

19.—Prof. Balfour Stewart, at Ballymagarvey, county Meath, Ireland, aged 59.

20.—Maj. Wm. W. Van Antwerp, editor of Jackson Patriot, at Jackson, aged 54.

22.—Congressman Seth C. Moffatt, at Washington, aged 46.—Dr. Ferdinand Vanderveer Havden, geologist at Philadelphia, aged 48.

23.—Dr. Alonzo B. Palmer, dean of the medical faculty at Ann Arbor, aged 72.

24.—Daniel Manning, Secretary of the Treasury, at Albany, aged 56, of Bright's disease.

27.—Andrew H. Forbes, formerly President of the Seaman's Union, at Detroit, aged 44, of inflammation of the lungs.

intianmation of the lungs.

28.—Gov. John Sappington Marmaduke. of Missouri, at Jefferson City, aged 54, of pneumonia.—Charles A. Rapallo, judge of the New York Court of Appeals, at New York, aged 64.

30.—Judge John W. Bell, "King of the Apoetle Islands," at Ashland, Wis., aged 83.—Dr. Dickson, botanist, at Peebles-shire, Scotland, aged 52.

#### **JANUARY** (1888).

1.—Joel Parker, war governor of New Jersey, at Philadelphia, aged 81, of paralysis.
2.—Eunice Cottrell on the Pequot reservation, near Lantern Hill, Conn. aged 115.—Gen. Isaac R. Trimble (Confederate) at Baltimore, aged 85.—Gen. Edward B. Alexander, at 8t. Paul, aged 75.
3.—Mrs. Spean Beach near Auburn N. V.

3.-Mrs. Susan Beach, near Auburn. N. Y.,

aged 109.

5.—Mrs. Mary Mahoney, at Hamilton, Ont., aged 104.—Ammi Baldwin, cashier of the Fidelity Bank, suddenly, at Walnut Hills, Cincinnati.

9.—Bonamy Price, political economist, aged 80.—Gen. Washington Seawell, at San Fran-\$200, aged 85.

10.—Dr. Peter Parker, once minister to China, at Washington, aged 84. 13.—Milton Frost, woodenware manufac-turer, at Detroit, aged 64.

14.—Postmistress Anna B. Cheatham widow of Gen. B. F. Cheatham, at Nashville.-Cheatham. V.B. Horton, former congressman and father-in-law of Gens. Jno. Pope and M. B. Force, at Pomeroy, O., aged 85.—Wm. H. Hickenlooper, Mormon bishop, aged 83.—Gen. Adin B. Under-

Mormon bishop, aged 88.—Gen. Adin B. Underwood, at Boston, aged 89.

15.—Geo. Walker. formerly U. S. Consulgeneral at Paris, aged 68.

16.—Dr. Jno. Gordon, said to be of the family of Lord Byron's mother, at Texarkana,

family of Lord Byron's mother, at 102212 access
Ark., aged 75, in poverty.
21.—Mrs. Eliza B. Garfield, mother of the
President, at Mentor, O., aged 86.—Carl Daniel
Adolf Dani, Socialist and editor of the Volks
Zeitung, at Brooklyn, aged 68.
22.—Walter M. Gibson, prime minister of
the Hawaiian Islands, at San Francisco, of
consumption.—John A. Balley, for 30 years
builder of U. S. lighthouses, at Marquette.
23.—Eugene M. Labiche, dramatist, at

23.—Eugene M. Labiche, dramatist, at Paris, aged 72.
24.—Viscount das Nogueiras, minister from Portugal, at Washington.—Frederick C. Brightly, of Brightly's Digests, at Philadelphia,

aged 76.
28.—Rear Admiral Clark H. Wells, at Washington, aged 65.—Chas. La Salle, editor of the Courier des Etats Unis, at Green Cove Springs,

-Michael Engelmann, leading citizen,

at Manistee, of pneumonia.
30.—Asa Gray, botanist, at Boston, aged 77.

#### FEBRUARY.

2 -Mary Howitt, the authoress, at Rome.

aged 84.

3.—Sir Henry Sumner Maine, the jurist, at

Cannes, aged 66.

6 —Witter J. Baxter, at Jonesville, Mich., aged 71.
7.—Mrs. Oliver Wendell Holmes, at Boston,

aged 68.

8.—Stephen J. Meaney, Irish editor, at

9.—Chauncey Davis, lumberman and first mayor of Muskegon, at that place, aged 76.

11.—Elbridge G. Merick, vessel owner, at

Detroit, aged 85.

13.—Vicar-General Bruyere, of paralysis, at ondon, aged nearly 90.—Archbishop Jean B.

Lamay, of pneumonia. at Santa Fe, aged 68. \_\_15.—D. R. Locke (Petroleum V. Nasby), at Toledo, aged 55.

17.—Alfred S. Barnes, publisher, at Brook-

17.—Alred 5. Barnes, publisher, at Brook-lyn, aged 71.

18.—Robert E. Roberts, at Detroit, aged 78.

21.—George H. Corliss, the inventor, at Providence, aged 70.

24.—William W. Corcoran, banker, at

Washington, aged 89.

#### MARCH.

2.—Dr. Chas. Waldron, Presbyterian clergyman, at prayer meeting in Detroit, aged 61.
4.—A. Bronson Alcott, philosopher, aged 88.

4.—A. Broison Arcott, philosopher, aged 86.
5.—Louisa M. Alcott, authoress, at Boston
Highlands.—Byron W. Cheever, acting professor of metallurgy, at Ann Arbor, aged 46.
8.—Gen. D. H. Strother (Porte Crayon) at
Charlestown, W. Va., aged 71.
9.—William I., Emperor of Germany, at
Bollin aced 90.

Berlin, aged 90.

12.—Henry Bergh, at New York, aged 64.—
Mrs. Ellen Tupper, the "bee woman," at El

Paso, Tex. 16.—Senator Hypolite Carnot, father of the French president, aged 87.

17.—Ex.Gov. Fairbanks, of Vermont, in ew York city.—Ferdinand Pope, German publisher at Detroit, killed in jumping on the cars, aged 42.

19 .- John P. King, once Senator from

Georgia, at Augusta, aged 98.

20.—J. Eastman Johnson, once regent of Michigan University, aged 86,

22.-Gen. George W. Cass, at New York, aged 78.

23.-Chief Justice Waite, at Washington, aged 71.

24. - John T. Hoffman, ex-Governor of New York, at Wiesbaden, aged 60.—Commodore Robert B. Hitchcock, at New York.

26.-Wm. Dorsheimer, of the New York

Star, at Savannah, aged 56.
27.—Edmund D. Gray, Irish member of Parliament, and once Mayor of Dublin, at Dublin, of heart disease.

29.—Charles Root, merchant, of Detroit, at New York, aged 54, of pneumonia.

Charles Dickerson, one of the 318 slaves set free by the will of John Randolph in 1833, at Sidney, O.—Col. John L. Haynes, of the First Texas (Union) cavalry, at Laredo, Tex., aged 67.—Leander Stone, of the Northwestern Christian Advocate, at Chicago, aged 57, of paralysis.

Benj. H. Brewster, formerly Attorney-general, at Philadelphia, aged 71, of paralysis

of the bladder.

5.-Jacob Sharp, briber of New York aldermen, at New York.

7.—Gen. Quincy A. Gillmore, at Brooklyn.— Maj. Gen, John H. King, at Washington, aged 67, of pneumonia.

8.—Lillian Olcott, actress, at New York,
14.—Nobel, the inventor of dynamite, at
Cannes.—Archbishop J. S. Alemany, late of
San Francisco, at Valencia, Spain, aged 75.

15.—Matthew Arnold, at Liverpool, aged

66, of heart disease.

18 - Dr. D. H. Agnew, celebrated surgeon, at New York.—Israel W. Andrews, formerly president of Marietta college, at Hartford, Conn.—Roscoe Conkling, at New York, aged 58, of an aural abscess.—John R. Hassard, New York, New of the New York Tribune, translator of the cipher dispatches, at New York, of consump-

-Simon Cassidy, a soldier of 1812, at Findlay, O., aged 98.—Gen. Wm. Dwight, once colonel of the New York Seventh, at Boston. —Thomas White, Canadian Minister of the In-

terior, at Ottawa.

22.—Rear-Admiral Charles S. Boggs, at New Brunswick, N. J., of paralysis. 28.—Jane Stuart, daughter of the artist,

Gilbert Stuart, at Newport.

29.—Allen B. Wilson, of the Wilson Sewing Machine, at Waterbury, Conn., aged 61.

.-Wm. J. Finlay, millionaire orewer and philanthropist, at Toledo, aged 67.—Admiral Sir Alfred Ryder drowned in the Thames.— Demas Barnes, once of the Brooklyn Argus, aged 61.

2.—Mrs. Cornelia H. Campbell, wife of Judge James V. Campbell, at Detroit, aged 65.— Bishop J. H. Hobart Brown, at Fond du Lac, aged 58, of pneumonia.
3.—Dr. Edward S. Dunster, of the Univer-

sity of Michigan, at Ann Arbor, aged 54. —D. D. Ruggles, of Manistee, aged 77 -James Birney, lately minister to Hol-

land, at Bay City, aged 70,

19.—Dr. J. A. B. Stone, at Detroit, aged 77,

27.—Mrs. Isabella G. D. Stewart, of Detroit, at St. Clair, aged 58.

JUNE.

1.—Dr. Nehemiah D. Stebbins, well known physician, formerly of Detroit, aged 86, at Dowagiac. 8.—James Freeman Clarke,

the Unitarian divine, at Jamaica Plain, aged 78

12.—Mrs. Mary Sheridan, mother of Lieut. Gen. Sheridan, at Somerset, O., aged 87. 15.—Emperor Frederick III. of Germany, at

Berlin, aged 56.—Dr. Rachel L. Bodley, dean of the Woman's Medical College of Pennsylvania, at Philadelphia.

24.—Judge Jno. Trunkey, of the Supreme Court of Pennsylvania, at London, aged 60. 25.—Rowland G. Hazard, financier, at

25.—Rowland G. Hazard, financier, at Peacedale, R. I., aged 85.—Sidney Howard Gay, historian, at New York.
29.—Father F. X. Weininger, for fifty years Roman Catholic missionary, at Cincinnati, aged 83.

30.—Gen. Jno. B. McIntosh, U. S. A., at New Brunswick, N. J., aged 90, of heart dis-

1.-Vicar General P. J. Conway, at Chicago,

aged 50. 4.—John J. Adam, of Tecumseh, State Treasurer in 1842, aged 81. 6.—Dr. Geo. Duffield, at Bloomfield, N. J.,

aged 71.

15.—Sir John Henry Brand, President of

15.—Sir John Henry Brand, President of the Orange Free State.

19.—E. P. Roe, novelist, at Cornwall-on-Hudson, of neuralgia of the heart.

20.—Gen. Thos. L. Young, lately Governor of Ohio, at Cincinnati.

22.—James Gaplis, lately Prosecuting Attorney, at Detroit, aged 47, of apoplexy.

30.—Bartley Campbell, playwright, at Bloomingdale Asylum, aged 44.

31.—Theo. H. Eaton, at Detroit, aged 72.

5.—Lieut. Gen. Philip H. Sheridan, at Non-

outt, Mass, aged 57.
6.—Jno. H. Harmon, once mayor, at Detroit, aged 69.
11.—Isaac Strauss, French composer, aged

12.-Lawrence Jerome, at Sharon, Conn., aged 68.

14.—Chas. Crocker, worth \$20,000,000, at Monterey, Cal., aged 66.

16.—Prof. Elisha Jones, of the University

of Michigan, at Denver, of consumption. 20.—Seth Green, fish breeder, at Rochester, aged 71.—Bishop Samuel S. Harris, at London, aged 47.

#### SEPTEMBER.

3.—John P. Clark, at Detroit, aged 80. 6.—Col. George L. Perkins, of Norwich, Conn., aged 100.—Col. Edward G. Butler, West Point's oldest graduate, at St. Louis, aged 89. —Lester Wallack, actor, at Stamford, Conn.,

of apoplexy.

12.—Prof. Richard A. Proctor, at New York, aged 51, of yellow fever.

21.—William Warren, the actor, at Boston,

aged 75.
23.—Francois Achille Bazaine, Marshal of

France, aged 77.
24.—Josiah D. Hayes, at Detroit, aged 68.

OCTOBER. 16.-Long John Wentworth, at Chicago,

aged 78.

19.—Dr. O. W. Wight, lately Health Officer.
19.—Dr. O. W. wight, lately Health Officer. Detroit, at Harper hospital, Detroit, aged 64.

26.—William T. Hamilton, ex-Governor of

Maryland, at Hagerstown, of pneumonia. 28.—Henry Starkey, Water Commissioner, at Detroit, aged 60.

29.-Judge Wm. K. McAllister, at Chicago.

NOVEMBER.

6.-S. C. Stacy, well-known lawyer, at Tecumseh, Mich. 8.—Mrs. Hannah Sharkey, at Youngstown,

5.—mrs. Hallan Sharkey, at Toungstown, 0. aged 111.

9.—Dr. Heinrich von Bamberger, eminent Austrian doctor, aged 66.

16.—Eliza Webster Jones, youngest daughter of N. Webster, at Bridgeport, Ct., aged 85.

17.—Rear-Admiral Charles H. Baldwin, at W. T. Sherman, at New York, aged 64.

New York, aged 66; his daughter, Mrs. Florence Deacon, died the same day.
18.—Dr. H. B. Sands, eminent surgeon, at New York, aged 59, of apoplexy.
23.—Porter B. Kibble, former State Land Commissioner, at Detroit, aged 75.
24.—Com. Cleero Price, U. S. N., at Troy, aged 69, of pneumonia.

# The Sporting World.

#### Champions of the Sporting World.

Base Ball-New York Club.

Base Bau—New 10rk Club.

Bicycling—1 mile, W. A. Rowe, 2:29 4-5; 5

miles, W. A. Rowe, 18:23 4-5; 25 miles, F. F.

Ires, 1:14:23 1-5; 100 miles, F. E. Dingley.

5:38:44 1-5; 1 hour, W. A. Rowe, 22 miles, 150

yards. W. A. Rowe holds the title of champion. Albert Shock rode 1405 miles in 6 days and W. J. Morgan rode 231 miles without dis-mounting, in 16 hours and 20 minutes.

mounting, in 16 hours and 20 minutes.

Tricycling—One mile, R. Howell in 2:49 2-5; 
miles, G. Gatehouse, 14:27 3-5; 10 miles, T. Battensbs, 29:41 3-5; 25 miles, T. W. Allard, 1, 18:23; 150 miles, In 10, 18:29 2-5. H. R. Goodwin rode 2050½ miles in 19 day. 2:08½; 1-mile pace, Johnston, 2:06½; 1-mile pace, with running mate, Westmont, 2:01½; 1-mile running, Ten Broeck, 1:39½.

Fedestrianism—100 yards, F. E. Schifferstein, 9:5-8 econds (doubtful); 220 yards, C. G. Wood, 21:3-5 seconds; 440 yards, W. Baker, 47½ seconds; 880 yards, F. Hewitt, 1:53½; 1 mile, W. G. George, 4:12½; 5 miles, J. White, M. G. Hour, L. Bennett, 11 miles, 970 yards.

wood, 523 inies; 1 hou, 12 hours, 2 hours, 370 yards.

Walking—1 mile, W. Perkins. 6:23; 5 miles,
J. W. Raby, 35:10; 100 miles, A. W. Sinclair,
19:41:50; greatest distance walked without
rest, 121 miles 825 yards. C. A. Harriman; 1
hour, 8 miles 802 yards, John Meagher.

William Spencer, England, walked 5306 miles in 100 days in 1884. He was 64 years old and walked both out of doors and in halls.

Swimming—1 mile, Charles F. Senk (straightaway), 12:4214; 5 miles, C. Whyte, 1:04:23. Capt. Webb kept afloat 60 hours without as-

sistance of any kind

Skating—i mile, Timothy Donoghue, 2:12 8-5; 5 miles, F. Dowd, 17:17; 10 miles, F. Dowd, 85:38; 50 miles, S. J. Montgomery, 4:18:38; 100 miles, John Ennis, 11:37:45; 1 hour, Alex. Faulsen, 16 miles 590 yards. Anna Clark Jagerisky skated 30 hours consecutively with but 30 minutes' rest at Detroit in 1868. Paulsen is champion.

is champion.

Rowing—114 miles, Watkins N. Y. crew (at Detroit) 7.46%; 2 miles (with turn), C. Courtney and F. E. Yates, 12:16; 3 miles, four ost straightaway), Argonauta crew, 15:37%; eight oars, Cornell U. B. C., 17:34%; single scull, Jake Gaudaur, 19:54; 5 miles, Harlem River crew, 30:44%; single scull, Edward Hanlan, 33:86%; 10 miles, Joshus Ward, 1:23; 50 miles, 10 A. Bernard, 8:55:20. W. O'Connor, champion of America; Henry Searle, chambion of world. pion of world.

The famons America's cup was won in 185 by the yacht America over the Aurora, off Owes. It has since been won by English Yechts 13 times, Scotch boats have won it 7 times and United States yachts have been vic-times at times in races for this trophy.

Yale College has won the inter-collegiate races 10 times and Harvard 10, Yale winning the races of the last five years.

The canoe (International) championship was won by the Leslie in 1886.

won by the Leslie in 1886.

Jumping—Running long jump (with weights)

John Howard 29 ft. 7 in.; standing long jump
(with weights) G. W. Hamilton, 14 ft. 5½ in.;
(without weights) H. M. Johnson, 10 ft. 10½
in.; running high jump, W. B. Page, 6 ft. 4 in.;
standing high jump, T. F. Kearney, 5 ft. 5½
in.; pole vault, hight, T. Ray, 11 ft. 6% in.;
horse, Chandler, 37 feet in long jump; horse,
Hampshire, high jump, 6 feet 8 inches.

Glass Ball Shooting—Capt. A. H. Bogardus,
5500 glass balls broken out of 5854 thrown
from trap. W. F. Carver hit 60,016 objects out
of a possible 64,881.

Fast Time—Locomotive on Pennsylvania

Fast Time-Locomotive on Pennsylvania railroad 1 mile in 5014 seconds; steamer City of New York from Roche's Point, England, to Sandy Hook Bar, 6 days and a trifle over 3 hours; salling vessel Liverpool to N. Y. Dreadnaught, 12 days 5 hours 25 minutes; 25 miles in 1 hour by the steamer South America on the Hudson river; yacht Volunteer champion and holds the America cup; yacht Puritan

sailed 38 miles in 8.32:37.

Notable Performances-Longest ball game, 24 innings, between the Harvard and Man-chester clubs at Boston May 11, 1877. John Hatfield threw a base ball 400 feet 714 inches. natured threw a base ball 400 feet 74 inches. Joseph Mct'ann set 6830 ems solid minion in 3 hours with helpers to empty sticks. Edward Brown swung a pair of 8-pound Indian clubs 6 hours 20 minutes without rest. Two carrier pigeons flew 700 miles in 100 hours from Madrid to Belgium. Detroit base ball club played 188 games in 1887. Steam engine 11 of Chicago threw a stream 340 feet 3 inches horizontally with 130 nounds' pressure and 100 horizontally with 130 pounds' pressure, and 180 feet perpendicularly. Steamer Robert E. Lee made the trip from St. Louis, Mc., to New Orleans, La., in 3 days, 18 hours, 14 minutes. John Malone, Chicago, dressed a bullock in 3 minutes and 40 seconds, go-as-you-please style, and P. Fitzgerald dressed 10 sheep in 33 minutes. Jo. Fellows climbed 17 feet 6 inches J. O. Fellows climbed 17 feet 6 inches, utes. hand-over-hand, on a rope, dead start, in 7 seconds. J. McMaster's dog Nigger ran 100 yards in 64 seconds, and holds the record. Andrew Cutler drew himself up by his little finger six times, and with one hand twelve times in 1878 at Louisville. Ice boat Scud times in 1878 at Louisville. Ice boat Scud holds the record, having made 15 miles in 20 minutes, 40 seconds, in 1878. Kenneth A. Skinner holds the roller-skate championship, having made one mile in 3 minutes, 11 seconds, and five miles in 15 minutes, 5014 seconds. C. Lee, Yale College, made a running kick of 9 feet 8 inches, and holds the record. J. E. Duffy, Ann Arbor, claims to have made a drop kick in foot ball of 168 feet 71/4 inches. This performance is not authenticated.

Pugilism—Heavy weight, Jack Kilrain; mid-dle weight, Jack Dempsey; light weight, Jack McAuliffe; feather weight, Tommy War-

Boxing weights: Feather weight, 116 to 126 pounds; light weight, under 140 pounds; mid-dle weight, 140 to 158 pounds; heavy weight,

over 158 pounds.

The largest stakes ever fought for in prize ring were \$10,000, by Tom Heyer and Yankee Sullivan in 1849. Longest battle fought was between John Smith and James Kelly, in Aus-tralia in 1865. Time 6 hours 15 minutes.

Last heavy-weight prize ring battle in America was between John L. Sullivan and Paddy Ryan at New Orleans in 1882. Nine rounds

were fought in 11 minutes

Billiards—Harvey McKenna holds the rec-ord for the biggest run, and M. Vignaux holds the record for the best run in the 14-inch balkline game.

Dr. Tanner's fasting record of 42 days has

not been broken.

Checker-player-Clarence A. Freeman.

Chess Player—Capt. McKenzie is the champion

All-round Athlete—Duncan C. Ross.
Yale College holds the foot-ball collegiate championship for 1888

In aerial jumping Sam Patch was the first champion, and Steve Brodie is the present holder of the championship.

Wrestling Champions—Catch-as catch-can and Lancashire, Joe Acton; Græco-roman, William Muldoon; Square-hold (collar-and-elbow), John McMahon; mixed style, Matsada Sorakichi.

Peter Johnson stayed under water 4% minutes in Music Hall, London, in 1882.

David L. Dowd lifted 144214 pounds with his hands in 1883, and with harness W. B. Curtis lifted 8239 pounds in 1868. Neither record has been broken.

W. B. Kenney threw a lacrosse ball 446 feet

in Australia in 1886.

The champion tennis player of the world is R. A. Seers.

#### Base Ball Record.

Base ball, the national game of America. on which more money is spent annually than on all other sports, is one of the oldest in the world. The ancient Greeks had a game of ball, which, while very dissimilar from ours, was at the same time a game of ball. The ancient Romans had a room in their baths allotted to the playing of ball that was called the sphæristerii. In the sixteenth century the game flourished, especially under the French and Italians. While it was played to a certain extent in this country early in its history, it was not until 1845 that there was an organized club in the United States, and then the Knickerbocker Base-ball Club of New York played under rules that bore some resem-June 16, 1846, blance to those of to-day. first match game was played in Hoboken. Boston had its first club in 1854, but it was six years later before any organized league was started, and then Philadelphia and Detroit were in it. About the same time the fast-growing craze reached the Pacific slope. In 1857 the National Association of Ball Players was organized and a regular set of rules was adopted, on which many of the present rules were founded. In 1859 the greatest game of ball ever played was contested at Medway, Mass., between two Massachusetts clubs, game of eighty innings the score stood 100 to 56. It attracted wide spread are play lasted two days, and at the close of the It attracted wide-spread attention, more especially as on the second day sixteen innings were played without a run being made by either side.

In 1866 excitement in New York and Philadelphia was very high, and 40,000 people

turned out to see the game.
In 1867 the Washington Club made its famous trip to the West, and in 1868 paid ball-players were a feature. In 1869 the craze players were a feature. spread through the Middle States, and one year later James White made his first appearance as a professional. He is the only one of the players of 1870 now in the National

In 1871 the first regular championship schedule was played, nine clubs comprising schedule was played, nine calos comprising the League, the championship being won by the Athletics, of Philadelphia. Harry Wright is the only man now in the ball field that played in the champion team that season. In 1872, '73, '74, and '75 the Bostons won the championship. In 1876 the National League championship. In 1876 the National League was formed with eight clubs, and Chicago won. Boston won in 1877 and 1878, Providence

in 1879, and Chicago in 1880. In 1881 Detroit made its first appearance in the National League. The standing of all the clubs in the National League since that time is here given in full.

m ruii:					
		Lost.	1885.	Won.	
Chicago,	56	28	Chicago,	87	25
Providence,	47	87	New York,	85	27
Buffalo,	45	38	Philadelphi	a.56	54
Detroit.	41	43	Providence.	. '53	57
Troy City,	89	45	Boston,	46	66
Boston,	88	45	Detroit,	41	67
Cleveland,	86	48	Buffalo,	88	74
Worcester,	82	50	St. Louis,	86	72
1882.			1886.		
Chicago,	55	29	Chicago,	90	84
Providence,	52	32	Detroit,	87	36
Buffalo.	45	39	New York.	75	44
Boston,	45	89	Philadelphi	a. 71	43
Cleveland,	42	40	Boston,	56	61
Detroit.	42	41	St. Louis,	48	79
Troy City,	85	48	Kansas City		88
Worcester,	18	66	Washington	. 25	91
1888.			1887.	,	-
Boston.	68	85	Detroit,	79	45
Chicago,	59	39	Philadelphia	a. 75	48
Providence.	58	40	Chicago,	71	52
Cleveland,	55	42	New York,	68	55
Buffalo,	52	45	Boston,	63	60
New York,	46	50	Pittsburg,	55	69
Detroit,	40	58	Washington	. 46	76
Philadelphia	.17	81	Indianapoli	s. 37	89
1884.	,		1888.	-,	
Providence,	84	28	New York.	84	47
Boston,	78	88	Chicago,	77	58
Buffalo,	64	47	Philadelphi	a. 69	61
Chicago,	62	50	Boston,	70	64
New York,	62	50	Detroit,	68	68
Philadelphia	.89	78	Pittsburg,	66	68
Cleveland,	85	77	Indianapoli		85
Detroit,	28	84	Washington	1. 48	86
		• • • • •		.,	

A rival of the old organization sprang into existence in 1881 in the American Association, which was formed in Cincinnati and has been which was formed in Cincinnati and has been in existence continuously ever since. Cincinnati won in 1882, the Athletics in 1883, the Metropolitans in 1884, St. Louis in 1885, and every season since. Of the year past the New Yorks won the championship of the world and of the National League; the St. Louis, the championship of the Association; the Des Moines, of the Western Association; the Limas, of the Thi-State League; and The Detroit Journal to be newsboy-championship pennant and cup. ship pennant and cup.

# The Press.

### Press Associations.

AMERICAN NEWSPAPER PUBLISHERS' ASSOCIA-

TION

N. . .

This association of leading daily newspapers affected through the efforts of W. H. This association of leading daily newspapers was effected through the efforts of "W. H. Brearley, of Detroit, Mich... and was brought into an organized form at Rochester, N. Y.. in February, 1887. The second annual meeting was held at Indianapolis in 1886, and the third occurs at Washington. D. C., March 5, 1889. The association has a New York office at room 104 Temple Court, (near the Post-office), in the care of Mr. James S. Metcalfe, the Marcher The entry dues pre 525; infitiation fea ager. The ennual due \$20. The officers are: The ennual dues are \$25; initiation fee,

President.-Wm. M. Singerly, Philadelphia

(Pa.) Record.

Secretary. - L. L. Morgan, New Haven (Conn.) Register.

Treasurer.-Wm. C. Bryant, Brooklyn (N.

Y.) Times.

NATIONAL EDITORIAL ASSOCIATION. Through the initiative efforts of B. B. Herbert, of Red Wing, Minn., a meeting of newspaper men was held at New Orleans during the World's Exposition. An organization was there effected to be known as the National Editorial Association. The second session was held in Cincinnati in February, 1886; the third at Denver in June, 1887; and the fourth at San Antonio, Texas, November 21–24, 1888. The fifth session will be in Detroit, Mich., at a date to be fixed by the Executive Committee. The official and authorized organ of the association, is The National Journalist, published monthly for \$1.50 a year, by B. B. Herbert, at 37 Virginia Ave., Indianapolis, Indiana. The membership is composed of delegates appointed by the various State Press Associations. The officers are as follow:

President.-J. R. Bettis, Little Rock (Ark.) Democrat. Vice-President.—John Hicks, Oshkosh (Wis.)

Northwestern.

Corresponding Secretary. - E. B. Fletcher,

Morris (Ill.) Herald.

Recording Secretary.—W. Kennedy, Potts-ville (Pa.) Chronicle-Herald.

There has never been any libel legislation of any consequence in Michigan. There are the usual provisions—Massachusetts and Wisconsin, for instance, have the like—that actions for libel shall not be tried before a justice (Howell's statutes §6815) and shall be tried in the county where one of the parties lives (§7547); that they shall be brought within two years (§8714), and that giving notice of justification—i. e. alleging that the charge was true—shall not be proof of malice even if not supported by evidence (\$7776); that no more costs than damages shall be recovered where the damages do not amount to fifty dollars (\$8965); and since 1879 it has been a misdemeanor to impute the commission of any crime or misdemeanor or of any degrading crime or missemestor or of any aggrating act, or to accuse a girl or woman of unchastity; the penalty for so doing may be a fine of \$100 or ninety days' imprisonment in the county fail, or both; a first offense may be tried by a justice, but not a later one, and the punishment for a second offense may range from \$50 to \$500, and costs, or three years' imprisonment in the State House of Correction at Ionia, or both (Act 210 of 1885). The State Constitution provides that in all

#### MICHIGAN PRESS ASSOCIATION.

The twenty-first anniversary of this association was held at Detroit, May 29, 30, 1888. The membership is open to all Michigan editors and publishers. The fee is \$2.00. The next annual meeting will be in Grand Rapids, at a date to be fixed by the Executive Committee.

The officers are:
President.—W. H. Brearley, Detroit Journal.
Vice-President.—Perry F. Powers, Cadillac

News and Express.

Secretary.-George W. Perry, Bellevue Gazette. Treasurer .- L. M. Sellers, Cedar Springs

Clipper. Executive Committee.-E. E. Stowe, Grand Rapids Tradesman; E. B. Fisher, Grand Rapids Eagle; J. Lloyd Brezee, Grand Rapids Telegram-Herald; W B. Weston, Grand Rapids Leader; F. W. Ball, Grand Rapids Democrat.

#### THE PRESS BROTHERHOOD.

This secret business association of journalists was organized July 21, 1887, at Port Huron, Mich. The second annual meeting was at Detroit, May 80, 1888; and the third will be held at Grand Rapids at a date to be fixed by the Executive Committee. The initiation fee and at Grand Rapius Executive Committee. The initiation at Executive Committee. The officers are \$2.00.

annual dues are \$2.00. The officers are:
President.—W. H. Brearley, Detroit Journal.
Vice-President.—J.W. Hine, Detroit Tribune,
Sage.—A. H. Finn, Port Huron Commercial-

Tribune. Senior Almoner.-Thos. Applegate, Adrian Times.

Junior Almoner.-James Slocum, Holly Ad-

Senior Monitor.-A. E. Meigs, Detroit News-

paper Union.
Junior Monitor.—Orno Strong, Nashville News. Senior Notary .- D. B. Ainger, Charlotte Republican.

Junior Notary .- Archibald McMillan, Bay City Press.

Pedagogue.-C. S. Hampton, Petoskey Inde-Treasurer.-A. H. Lowrie, Elgin (Ill.) News. pendent.

#### Libel Laws.

prosecutions for libel the truth may be given in evidence to the jury; and if it shall appear to the jury that the matter charged as libelous is true and was published with good mo-tives and for justifiable ends, the party shall be acquitted. The jury shall "have the right to determine the law and the fact." The word "prosecutions" in the first clause seems to prosecutions in the institute seems to indicate that its application is to criminal cases, and substantially the same provision, more or less guarded, is to be found in most of the State Constitutions.

In 1885 an act was passed in Michigan providing that only actual damages could be recovered if the publication was made in good faith and involved no criminal charge and was based on a mistake of fact and was promptly corrected; that "actual damages" should be limited to such as are suffered in respect to property, business, trade, profession, or occupation, and that in addition to actual damages there could never be more than \$5000 recovered. This act was held, in Park v. Free Press (Nov. 28, 1888) to be in vio-lation of constitutional rights, on the ground that its effect might be to deprive some per-sons of any remedy at all; and it was declared void. There has been recent legislation elsewhere of the same tenor, as, for example,

in Minnesota.

The latest English statute on the subject is the Newspaper Libel and Registration Act (44 and 45 Vict., ch. 69), which provides that any report published in any newspaper of the proceedings of a public meeting shall be privileged if such meeting was lawfully convened for a lawful purpose and open to the public, and if such report was fair and accurate and published without malice, and if the publication of the matter complained of was for the public benefit; provided always that the pro-tection intended to be afforded by this section shall not be available as a defense in any proceeding if the plaintiff or prosecutor can show that the defendant has refused to insert in the newspaper in which the report containing the matter complained of appeared, a reasonable letter or statement of explanation or contradiction by or on behalf of such plaintiff or prosecutor. And no criminal prosecution shall be commenced against any proprietor, publisher, editor or any person re-sponsible for the publication of a newspaper for any libel published therein without the written flat or allowance of the Director of Public Prosecutions in England, or of Her Majesty's Attorney-General in Ireland. And the penalty upon summary conviction, without a jury, for a libel considered trivial by the court, shall not exceed £50.

But the tendency of the decisions in Michigan has been to subject the press to very stringent regulations. It was said in the case of Tryon v. Evening News Association (39 Mich, 636) that all newspaper mention of private persons must be made under the private obligation of publishing no untruths to their prejudice and the public obligation of saying nothing at all to their prejudice unless on adequate occasions. Tryon was himself a newspaper reporter, and the Evening News had charged him with making public a private conversation. A newspaper article charging a druggist with making counterfeit Haarlem oil and putting it in counterfeit wrappers, was held libelous in Steketee v. Kimm, 48 Mich. The accusation of adultery and murder was held a libel for which the accused was entitled to damages unless it should be proved that he committed the murder. Peoples v. De-troit Post and Tribune Co., 54 Mich. 457. It is libelous to publish of a lawyer an article charging him with giving dishonest, unpro-fessional advice, with making false statements. in professional dealings, with incurring loss of confidence by misconduct, with embezzling moneys and with making false charges for services and extorting excessive compensation. Atkinson v. Free Press, 46 Mich. 341. But if a man furnishes a paper with a puff of himself, and the printer, by innocent typographical errors, makes it exceedingly ludicrous and the man a laughing stock, it cannot be held a malicious libel. Sullings v. Shakespeare, 46 malicious libel. Mich, 408, A publication charging a deputy sheriff with wrongfully arresting and hand-cuffing people, merely to get the legal fees, and with oppressing the poor and friendless under color of office, is libelous in itself. Bourresseau v. Detroit Evening Journal Co., 68

A newspaper article, however, must be taken altogether in deciding whether it be libelous; disjointed extracts will not support an action. O'Connor v. Sill, 60 Mich. 175. But it is said that newspapers have no privilege that will excuse them in printing libels of which any other publication would not be excused. Foster v. Scripps, 39 Mich. 376. They may discover v. Scripps, 39 Mich. 376. They may discover v. Scripps, 39 Mich. 376. cuss what relates to the life, habits, comfort happiness and welfare of the people, and in happiness and werrare of the people, and medoing so may state facts, draw inferences therefrom and express views upon the facts; their deductions, even if false, are not actionable unless they cause special damages. But damage is presumed if they impute the companion of union. Peopless, Part & Tribuse. mission of crime. Peoples v. Post & Tribune. 54 Mich. 457. It is matter of privilege to call public attention to the act of a judicial officer in ordering a person into confinement without a charge against him, or in requiring bail in an amount which, considering the prisoner's probable means and position in life, he is unable to pay; these are violations of the most important guarantees of constitutional free-dom, and are matters of public concern. Miner v. Detroit Post & Tribune Co., 49 Mich. On the other hand a publication in a newspaper falsely imputing a charge of crime against a candidate for an elective office, is not privileged, though made in an honest belief of its truth; though the fact that it was published in good faith and after reasonable investigation may go in mitigation of damages. son v. Bruce, 59 Mich. 467. And when Mr. Wheaton was a candidate for the post of comptroller of Detroit, his brother-in-law, Mr. Beecher, made the remark to a newspaper re-porter that he "shouldn't wonder if the city would have the same experience with Wheaton that England had with Cyprus, when England thought it had secured a great bargain, but it turned out a huge graveyard." This interview being published in a newspaper was considered not privileged. Wheaton v. Beecher (June 16, 1887). The publication of court pro-ceedings is not so far privileged as to justify a sensational accompaniment of defamatory comments upon the character of those in re lation to whom the proceedings are taken. Scripps v. Reilly, 38 Mich. 10. Nor is it privileged to the extent of protecting statements made in connection therewith but drawn from other sources and without stating the judicial conclusion. Bathrick v. Detroit Post & Trib-

une Co., 50 Mich. 629.

The doctrine that malice must be presumed rests on the theory that the wilful publication of injurious statements involves the design to produce whatever injury must necessarily follow; and when done purposely, knowingly and for no good purpose or justifiable end, it is malicious in the sight of the law even if done without any actual personal ill-will, Maclean v. Scripps, 52 Mich. 215. If a retraction is not published until after suit is begun, it cannot be considered in mitgation of damages. Evening News v. Tryon, 42 Mich. 549. Nor will good faith protect a false publication, nor can one excuse himself for making a mistaken assault upon his neighbor's reputation, by showing the absence of malice, when, even had his charge been true, there was no proper purpose in bringing the matter to public notice. Whittemore v. Weiss, 33 Mich. 348.

#### Prices of Composition.

The following are the rates per thousand erns pair for composition by daily papers in most of our cities, according to the latest statistics collected by the American Newspaper Publishers' Association. The first figures given after each name are for composition on morning papers; the second for evening papers; where but one rate is given, it is for

Mich, 425.

both, unless starred, when no evening rate is quoted:

Akron, O., 30 and 25; Albany, 40, 35; Baltimore, 45, 40; Boston, 40\*; Brooklyn, 50, 40; Buffalo, 35, 32; Buflington, V., 25\*; Chicago, 46, 41; Cincinnati, 45, 42; Cleveland, 40, 35; Columbus and Dayton, O., 35, 32; Denver 50, 45; Des Moines, 33½, 20 to 25; Detroit, 38, 36; El Paso, 40, 35; Ft. Worth, 40\*; Grand Rapids, 35; 30; Hamilton, Ont., 32; Hartford, 40, 35; ville, Pa., 30, 28; Providence, 40, 35; Raleig Indianapolis, 38, 36; Jackson, Mich., 30, 27; Baleig, Reading, Pa., 30; Bochester, 33, 30; Sa Jackson, Mich., 30, 27; Raleig, Reading, Pa., 30; Bochester, 33, 30; Sa Jackson, Mich., 30, 27; Raleing, Reading, Pa., 30; Bochester, 33, 30; Sa Jackson, 35; London, Ont., 28, 25; Louisville, 4746; Ramanzoo, 30, 25; Kansas City, 40, 35; Little Rock, 35; London, Ont., 28, 25; Louisville, 4746; St. Louis, 38 (evening rate Rock, 35; London, Ont., 28, 25; Louisville, 4746; San Francisco, 50, 45; Savannah, 37746, 334, 40, 40, 35; Minneapolis, 42, 37; Montreal, 32, 29; Nashville and New Haven, 40, 35; New Orselans, 40, 40; Wortstown, Pa., 20; Omaha, 40, 35 to 37; Oshkosh, 28, 23; Philadelphia, 40; Pittsburg, 4256, 3752; Port-

#### Additional Populations of American Cities.

Since the foregoin	ng page (76) of "Populat g additions and correction	ions of Cities i	n the Unit	ed States" was elec
erouj pou, uno romo w m	Population in 1889.			Population in 188
Allentown Penn		Fall River M	ARK	65 00
Council Bluffs, Iowa.		Galveston, Te	X88	
-,	Lexington, Ky			
			•	
ERRATA.—The Pre	esidential vote of Minneses follows:	ota (see page ?	3) was not	officially proclaime

In the list of Michigan post-offices, page 94, insert Hallston, Alger Co., the designation to which the name "Anna River" was recently changed.

General Byron R. Pierce is Superintendent of the Soldiers' Home at Grand Rapids Mich. (page 83).

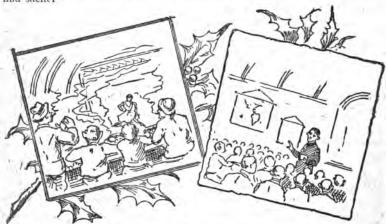
The Detroit Journal Company would be pleased to receive from any reader of this number of the Year-Book, materials or suggestions for a similar issue already contemplated for 1890. They should be sent to the Journal office by October 1, 1889.



# The Casino Tabernacle.

NE of the most satisfactory transformations that could take place in the city, is the change of the Casino Theatre to the Casino Tabernacle.

The Alger Sunday School, reaching specially after the Newsboys, had been subjected to various vicissitudes. The Superintendent, Mr. C. W. Moore, held on to the work in spite of aggravating difficulties, wandering about with the school, accompanied by a faithful company of teachers, from place to place, as they could find shelter



The necessities of the school were so imperative, and the more than 2,000 newsboys, in the city so neglected, as to religious and moral influences, that Mr. Moore commenced negotiations for the securing of the Casino Theatre. The undertaking was so great that no one man could take up the moral and financial burden alone, and after consultation, he found prompt response from Mr. W. H. Brearley, who agreed to take an equal share of all the burdens, incident to the enterprise.

These two gentlemen assumed this financial and moral obligation in the firm belief that the citizens of Detroit, irrespective of religious associations, would come to their help in this attempt to displace a hot-bed of vice, by such a work as is now in progress at the Casino Tabernacle.

The Sunday School meets every Sunday afternoon at 3 o'clock.

Mr. C. W. Moore is the Superintendent, and visitors are invited to seats on the platform. Any Christian man or woman is invited to gather a class of boys or girls at any time and join the school in a body any Sunday.

Rev. L. B. Plumer, the minister in charge, conducts a Gospel service at 7.30 P. M. At this service, Gospel singing, under the lead of a trained choir, is a prominent feature. There will also be a brief Gospel sermon.

The seats to these services will always be free, and everybody will be cordially welcome.

The Minister in charge, can be seen every morning, from 10 to 12, in the office of the Casino Tabernacle, 198 Griswold street. Telephone 660.

Telephone messages can be sent any hour, day or night.

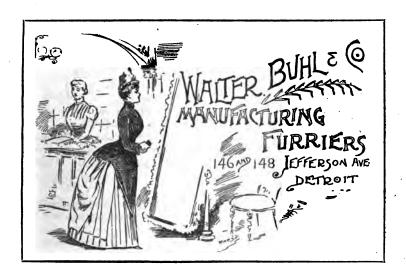
The Auditorium is one of the most convenient in the city, and can be cured for reputable purposes.

# SEAL CLOAKS

AND

# **FURS**

MOF ALL KINDS....



**MANUFACTURERS** 

---- AND ----

IMPORTERS.

## The Detroit Journal Target.

WITH the idea of testing the abilities of Michigan marksmen and stimulating an interest in rifle-shooting, THE DETROIT JOURNAL in August, 1888,

championship badge to should spoil in the most a Detroit Journal tartion excited great intermany fine scores being best being as follow: offered a money prize and a gold the marksman who creditable manner\* get. The competiest and ended in sent in, the four

I.
F. H. Joslin,
of Pott's lumber camp,
Oscoda county,
Mich., made a
count of 47 out
of a possible 50.

II.

C. S. Damon, of Fenton, Michigan, made 46.

III.

Joseph Dunphy, of Manistee, Mich., made 34.

IV.

Charles E. Cooper, of Manton, Michigan, made 31.

THE DETROIT JOURNAL has the written agreement of Messrs. Joslin and Damon to a shooting contest, to be arranged by THE DETROIT JOURNAL, at Detroit in May, 1889.

<sup>\*</sup>Ten shots were fired with a rifle "off-hand" at a distance of 50 vards.







# FURS,

LADIES' AND GENT'S

CAPS, GLOVES, COATS,

Collars and Cuffs, Rugs, Robes,



WALTER BUHL & CO.







## Questions to Be Answered.



IN October THE DETROIT JOURNAL began the publication of a series of questions to be answered through the paper. Prizes of \$15, \$10, and \$5 were offered for the most complete set of answers, and an additional prize of \$5 was offered to the person who should send his or her answers in the best form for publication.

The questions have dealt largely with the topics of Michigan history, and the result has been to stimulate the interest in reading along this line. The other questions have had to do with general literary and historical subjects; and many of the answers have shown an amount of research that must have been interesting to the persons who have undertaken to answer them, while, at the same time, the readers of THE JOURNAL have enjoyed the fruits of such research, as the answers have been published from week to week.

To know to whom we are indebted for wise or witty sayings, and to keep in mind who were the men to found the institutions we now enjoy, is to incite us to imitate and to perpetuate what has been done, and to feel grateful to those who have helped to push the car of progress.

The questions end with the last Saturday in December, and the prizes will be awarded in January.



# OF VATORS

MANUFACTURED BY THE

# IOWARD IRON WORKS, BUFFALO, N. Y.

All Kinds of Freight and Passenger Elevators.

Hydraulic, Spur Gear, Worm Gear, Hand Power.

THE BEST IN USE AS TO

URABILITY, PROMPTNESS OF SERVICE AND ECONOMY, with all Modern Improvements.

HESE ELEVATORS are easily adaptable to the use of power by electricity, gas, steam, water or hand power, and have been placed in the following Detroit houses:

Michigan Stove Works, Banner Tobacco Works, Brown Bros. Clgar Factory, Daniels & S. J. W. Fales, A. R. Munger & Co., Beardsley Furniture Factory, Detroit Paper Co., Ivert Lithograph Co., Vail & Crane, Detroit Stove Co., Sherman S. Jewett & Co., City flway Offices, Miller Building, A Laffrey, A. Sheley, Gordon W. Lloyd, and many other ding business houses in the city.

# RICHMOND & HARRIS, Solo Agts,

Telephone 869.

69 Larned St. West.

W. GILLETT, President.

F. W. HAYES, Vice-President. J. P. GILMORE, Cashier.

# The Preston National Bank,

DETROIT, MICH.

CAPITAL.

\$1,000,000.

#### **DIRECTORS:** C. A. BLACK.

P. W. HAYES, JAMES D. STANDISH.

H. S. PINGREE,

JAS. E. DAVIS A. E. F. WHITE. JOHN CANFIELD, Manistee.

PRINCEON. Chicago.

V. R. BURT. East Saginaw.

# The Yellow Fever Plague.

WHEN, in the month of September, the yellow fever broke out in Jacksonville, Florida, and the people were force by the pestilence to leave their homes and their business; who destitution and starvation stared the whites and the negro in the face; when the call went up from the South to bread, for medicines and for nurses, The Detroit Journal

was prompt to announce to th people of Michigan that it wa ready to be their agent in co lecting and forwarding mone for the suffering. The Mayor and of Detroit Jacksonvill gave their official sanction THE JOURNAL'S efforts. TI response was prompt. Indivi uals, churches, Sabbath school social and political clubs, as hundreds of school children at work to raise a fund the Southern people the syr of the Peninsular State.

about 3,000 separations, representing thousands of people uted, each according her ability, aggregation

addition to this, T. JOURNAL, at its or sent Wm. Murray, nurse, to Jacksonvil was able to be of grance to the feve

assiststricken people at Camp Perry. This prompt action on the people of The Journal called out many hearty expressions of thanks ness from the Florida officials.



\$3013.59.

DETROIT

expense,

trained

wherehe

#### The Florida Information Bureau.



HERE never was such an opportunity for investments in Florida as at the present time. Orange and Lemon Groves in bearing can be purchased at less than prices paid for groves set out with young nursery stock. The yellow fever has demoralized business, but it

s not hurt the groves, nor affected their intrinsic value. Digations must be met and mortgages must be satisfied. Inter homes in the Sunny South can be bought now at special regains. No fear of yellow fever in the winter, nor at any time an orange grove in the high pine lands.

The thoughtful man in Michigan must be convinced that the undation of many a capitalist's fortune in the State was laid by vestments in Michigan Pine Land when it was cheap. It is ill possible to secure tracts of Florida Pine Land at government ice.

Reliable information concerning the State and letter of introduction to the owner of property in Florida, direct, will be furshed FREE OF CHARGE. All commissions to agents and all extras "incident to an investment will thus be saved.

Special information as to the most desirable routes to Florida, ites of excursions with special rates, etc., will be furnished BEE OF CHARGE.

Twenty-five cents in postage stamps must be enclosed to ver the cost of correspondence.

Address all communications,

THE FLORIDA INFORMATION BUREAU.

200 GRISWOLD STREET, DETROIT, MICH.

## Poor Richard's Wise Words.

THE words of wisdom which Benjamin Franklin wrote a century and more ago are as pertinent to-day as they were on the day when they were written. The relations of employer and



employed are more unsettled than they were in the days; of "Poor Richard"; but faithful work on the part of the workingman and the appreciation of such fidelity on the part of the capitalist are the only things to-day which keep the industrial army in motion.

Michigan owes much to Franklin, since it was he who drew the boundary line of the United States so that it passed through Lake Superior instead of through the Straits of Mack-

inac, thus giving to us instead of Canada the rich Upper Peninsula. For such services the people of this State should hold the American sage in high honor.

THE JOURNAL has been publishing from day to day at the head of its editorial column the sayings of Poor Richard; and there have been many indications that these bits of judicious advice have done good work. Many who have never found time or opportunity to read these bits of wisdom in their original form have been glad to have the bits of advice with the news of the day.



IS THE

LARGEST.

STRONGEST

AND MOST SUCCESSFUL

# ACCIDENT INSURANCE CO.

IN THE WORLD.

MORAL. INSURE IN THE TRAVELERS. Pays all claims without discount

than other reliable companies.

CASH ASSETS, OVER \$10,000,000. Surplus to Policy-Holders, \$2,000,000.

RODNEY DENNIS, SECRETARY. JAS. G. BATTERSON, PRESIDENT. JOHN E. MORRIS, Asst. Sec'y.

# J. W. THOMPSON,

State Agent for Michigan and Indiana. 44 Campau Building,

DETROIT, - MICH.

# Word Building.



JURING the past summer THE DETROIT

JOURNAL offered a prize to the person who should make the most words out of the name of the paper. When the lists came in they were so long and so many that THE JOURNAL printed the longest list, and then offered another prize to the person who should find the most mistakes in the list as printed.

The result was a second very interesting competition. The list was brought down to 1953 words, and the prize went to Mrs. George R. Merrill, of Detroit

The prize for the largest number of the mistakes found in the published list was won by Mrs. E. C. Raymond, of Grass Lake.

The result was a decided surprise. It was not supposed possible that so large a list could be made from the letters of the name of this paper; though there never was a question as to the fact that in The Detroit Journal itself every word relating to the news of the day can be found on every publication day of the year.

THE
HEST
BEST
WORD BUILDER
WORD BUILDER
IS THE CALIGRAPH
"IT STANDS AT THE HEAD."

From the inception of the idea of a machine to build words by machinery to its practical accomplishment was over 150 years. The original inventors never immagined that a machine could be made that would work for years, and build words at the rate of 180 a mipute, as has been done by only one machine,







This instrument can be supplied in the types displayed in the following five lines as desired:

IT IS THE EASIEST MACHINE TO LEARN.

MALL GOTHIG.

It runs the lightest of any made.

MALL ROMAN.

IT KEEPS IN ORDER THE LONGEST.

LARGE GOTHIC.

It has taken the most awards of any.

It costs \$70. for No. 1; \$85. for No. 2.

LARGE ROMAN.

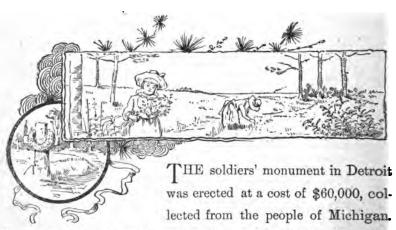
# The American Writing Machine Co.

HARTFORD, CONN.

State Agency for Michigan,

24 Congress St. West, DETROIT.

### The Children's Gift of Wild Flowers.



For many years the monument had been decorated on Memorial Day, by a few patriotic people of Detroit. In 1888, The Detroit Journal invited the children of Michigan to gather the early wild flowers and send them, to the decorating committee of ladies. The response was both quick and general, and on last Memorial Day the Michigan soldiers' monument was garlanded for the first time by the people of the whole State. The flowers were sent in such abundance that baskets of them were sent to all the hospitals and charitable institutions of Detroit.

The list of flower-gatherers occupied columns in the special Memorial Day edition of The Detroit Journal, and almost every city, town, and village in the State was represented among the givers. This result was a beautiful expression of the spirit of patriotism and of devotion to the memory of those who found it "a sweet and blessed thing to die for one's country."

GARPETS.

CURTAINS.

GAMBLE & PARTRIDGE, at 221 and 223 Woodward Avenue, is fast gaining an enviable position among the leading institutions of Detroit. An elegant variety, the best goods, the choicest designs, charming and unique styles in foreign and domestic Carpets, Curtains and Draperies. The large assortment and quaint devices that may be seen in the Japanese Novelty Department, are well worth examining.

GAMBLE & PARTRIDGE,
221 and 223 Woodward Ave.





#### The Claverhouse Sword.

THIS very interesting old relic may be seen hanging in the office of THE DETROIT JOURNAL. It was taken from the body of Claverhouse by General Mackay, and willed by him to his cousin, James Mackay, and by him, in turn, to his son, General Alex. McKay, by him to his brother, Donald McKay, by him to his son, and by him to his daughter's son, John McKenzie, who sold it to W. H. Brearley. The above statements are given upon the authority of John McKenzie, whose authority is his family traditions.

On the 27th of July, 1689, the Covenanters, under General Mackay, defeated the forces of James II., which were commanded by Lord Graham of Claverhouse, in the famous battle of Killiecrankie.

This Lord Claverhouse was the one mentioned in the following verse from "Bonnie Dundee":

To the Lords of Convention
"Twas Claverhouse spoke,
Ere the king's crown go down
There are crowns to be broke,

Robert Burns also wrote of him in the following stanza from the poem entitled, "Where hae ye been":

I fought at land, I fought at sea;
At hame I fought my auntie, O;
But I met the devil an' Dundee,
On the braes o' Killiecrankie, O.
The bauld Pitcur fell in a fur,
An' Clavers got a clankie, O;
Or I had fed an Athole gled,
On the braes o' Killiecrankie, O.

The blade of the sword is stamped with the name of Andrea Ferrara, one of the most famous of Italian sword makers, and gives evidence of age and superiority of workmanship.

Any one interested may see this old sword by calling at the office of The Detroit Journal.



Owning and operating the only line of Steel Sidewheel Passenger Steamers on the great lakes.

CITY OF CLEVELAND, CITY OF DETROIT,

CITY OF ALPENA, CITY OF MACKINAC,

CITY OF THE STRAITS.

#### BETWEEN CLEVELAND AND DETROIT.

EVERY WEEK DAY.

Leare	Clereland,		9 P. M.	Arrive	Detroit, .		••	5 A. M.
**	Detroit,		10 P. M.	"	Cle <b>re</b> land,			5 A. M.

#### SPECIAL SUNDAY NIGHT TRIPS DURING SUMMER MONTHS.

This service affords commercial travelers and tourists a quiet night's rest, cool and free from dust—a great relief for those who have endured a hot and dusty, noisy ride by rail. The equipment is represented by the two new steamships, City of Cleveland and City of Detroit, now famous as the largest and most magnificent on fresh water. The popularity of this Company has been justly earned by many years of study for the comfort of its patrons, by universal courtesy and the fulfilment of every promise.

#### BETWEEN DETROIT AND MACKINAC,

FOUR TRIPS PER WEEK,

Leave Detroit Mondays and Saturdays, 10 P.M., Wednesdays and Fridays, 9 A.M. Arr. Mackinac Wednesdays and Mondays, 7 A.M., Thurs. and Saturdays, 5:30 P.M.

Calling at Port Huron, Sand Beach, Oscoda, Alpena, Cheboygan, and St. Ignace; and making direct connections for Petoskey, Harbor Springs, Sault Ste Marie, Charlevoix, Chicago, Milwaukee, Marquette, Duluth, and with the Duluth, South Shore and Atlantic Railway for the northwest.

A summer vacation trip to Mackinac and the surrounding resorts of the great lakes, is of unusual attractiveness. In fact, no other can be found which will compass half its pleasures at so low a cost.

### BETWEEN CHICAGO AND ST. JOSEPH, Benton Harbor.

THE FRUIT BELT OF MICHIGAN. Daily Trips each way.

Leaving	Chicago,				9 A. M.	Arriving St. Joseph,	1 P.M.
**	St. Joseph.	-	_	_	10 P. M.	" Chicago.	3 A. M.

THE LAKE ROUTE TO CHICAGO'S SARATOGA.

# The Detroit and Cleveland Steam Navigation Co.

D. CARTER, Gen'l Manager. E. B. WHITCOMB, Q. P. A.,
DETROIT, MICHIGAN.

### Accident Insurance.



DURING the past year The Detroit Journal offered One Hundred Dollars to the heirs of any person killed on a railroad, who should have on his person at the time of his death a copy of The Journal of that or the preceding day. The offer was a unique form of accident insurance, and as such found favor with the traveling public.

Happily, however, Michigan railroads have been quite free from accidents during the past year, and no claims have been made for the \$100 in gold. The offer of The Detroit Journal, however, was made in good faith, and is not withdrawn although it is not now being published in the paper. It will hold good when claimed.

While The Journal most devoutly hopes that the Michigan railroads will keep up their good record, yet there can be no question that The Journal, printed from plates made from clear and beautiful type, and containing all the news, is the best paper for railway reading. The various editions of The Journal are sent to the trains promptly, and if travelers have any trouble to get the paper on trains, it will be a favor to the publishers, if the matter is reported to The Journal office, at the earliest moment possible, in order that the failure may be located and remedied.

Do You Ever Travel? In the course of a year nearly everybody takes a journey, either for business or pleasure. In either case a saving in railway and steamship fares is an important matter. As the old lady said, "They charge so dreadful much to ride on their old cars." The expense of travel when full local fare must be paid is indeed a tax.

Then when you go to the agent of any one line, you can get no information as to rates, or anything else of any competing line. Mr. H. D. Smith at the Griswold House and at the Cadillac Hotel is commissioned agent of several lines of transportation. In addition to this he has correspondents in all parts of the country who promptly telegraph him of any cuts in rates, or special excursion rates, or special low rates for a limited ticket; in short, Mr. Smith is the most thoroughly posted railroad man in the city, and on long or short rides he can save you money.

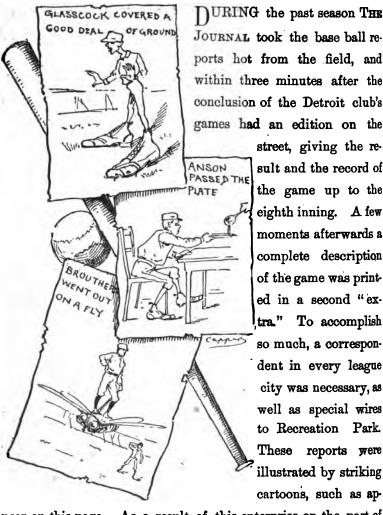
When there is a journey ahead a great deal of discomfort and anxiety can be saved by settling the trunk business. The old one has been ruined by the last trip—perhaps it was poorly made of poorly seasoned stock by poor workmen.

The establishment of Wm. Brown has long been known as the leading manufactory of the State, producing and handling only reliable goods, at popular prices,

143 Woodward Ave., and 197 to 201 Jefferson Avenue.

Do you want the best Accident Insurance, and do you want it at the very lowest rates, consistent with absolute security and prompt payment? If you do, write to H. R. Josselyn & Co., 10 Michigan Ave., Detroit, Mich., General Agents United States. Mutual Accident Association, of New York.

#### "The Journal's" Base Ball Reports.



pear on this page. As a result of this enterprise on the part of THE JOURNAL, the city patrons of the paper were quickly supplied with the results of the games; and the outgoing trains bore the tidings to eager readers all over the state. In many towns where THE JOURNAL comes as a morning paper, the base ball edition was delivered in time to enliven the breakfast table with the news from the diamond.

# CLOUGH & WARREN,

State Agents for the Matchless

# DECKER BROTHERS, EVERETT,

And Other Standard PIANOS,

CLOUGH & WARREN

# PIANOS



# ORGANS

Exceptionally Low Prices.

Easy Payments.

Don't Fail to see us before Purchasing a Piano or Organ.

WE CAN SAVE YOU MONEY IF YOU BUT GIVE US THE OPPORTUNITY.

# Clough & Warren Organ Co.,

FACTORY AND WAREROOMS,

Congress Street West, near corner Fifth.

#### Santa Claus and "The Journal."



pairs of small feet, which measures you shall obtain by calling for them through The Journal. Then call upon the good people of Detroit to fill these 500 pairs of stockings with books and toys and candies, and whatsoever things make a bright and happy Christmas. Attend carefully to these my commands, that givers and receivers alike may get enjoyment from my day. I, myself, will attend to the distribution on Christmas morning."

Everything was completed according to orders. Firms and individuals, boys and girls, fathers and mothers, all joined in the work of filling the stockings made by the Detroit Knitting Company for The Detroit Journal. And on Christmas morning Santa Claus came in state and drove merrily through the streets, making happy 500 homes by leaving in each a well-filled pair of stockings. Those who so promptly came forward to give of their bountiful store to those who had little must have felt happier all through the holiday season for having made others happy. Many of the little ones who were thus supplied with warm stockings and pretty books and toys will look back on the Christmas of 1888 as the reddest of all their red letter days.

# Marvin's New Music House.

152 Woodward Avenue, Detroit, Mich.

No Old, Shabby Goods to Work Off,

No Stool-Pigeon Pianos,

No Repossessed Pianos,

No Charge for a Name,

No Cheap Goods.

THE BEST OR NONE AT ALL.

LOOK BEFORE YOU LEAP.

Correspondence and Visits Solicited.

DON'T FORGET,

MARVIN'S NEW STORE,

253 Woodward Avenue.

TELEPHONE 1415.

#### Bird's-eye View of Detroit.

IN the office of many a Michigan merchant, manufacturer or banker, and in many a home throughout the State, hangs a large picture called "The Journal's Bird's-eye View of Detroit".

This picture claims attention both as an historical record and as a work of art. It was made after a painting by John R. Chapin, the celebrated New York artist and magazine illustrator, who is known to several appropriate of the several properties of t

eral generations of the readers of Harpers' Magazine.

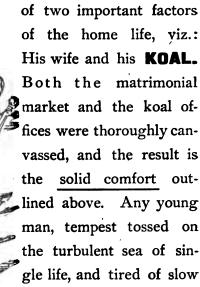
The picture shows the extent and character of the city;

and gives an accurate idea of the river front and the shipping. Individual studies were made of hundreds of the leading buildings of the city, and great pains were taken to secure exactness. The painting was reproduced by the gelatine process, which secures delicacy and softness without any sacrifice of detail.

The plate was prepared for a printing press, and was printed in New York City. An edition of 53,000 copies was exhausted almost immediately, and a second edition sold readily. No other paper in Detroit has ever attempted so valuable an enterprise or carried it out so completely. The growth of Detroit of late years has been, and promises still to be, so very rapid that such a picture will be prized more highly by each succeeding generation. Also, changes in the style and rig of vessels doing business on the great lakes are constantly being made, so that a record of the appearance of the shipping of to-day will be a wonder in the days to come.

#### MARRIAGE

Is not a failure with the subject of this illustration. He has displayed excellent judgment in the selection



starvation in boarding houses, who can afford to jump into such a delightful condition, should purchase the **English Cannel Koal** for the grate, free from dust, and burns to an ash, giving a long flame and brightening the fireside; Loyal Sock for the range or cook stove, and the old, reliable Franklin hard koal for the furnace.

Any of the above can be purchased from

#### O. W. SHIPMAN,

COR. GRISWOLD AND LARNED.

(Telephone 357-1 Ring.)

#### The Newsboys' Base Ball Club.

THE greatest novelty ever seen in the base ball world was the Newsboys' Base Ball Club, as conceived and carried out by THE DETROIT JOURNAL TIN 1887 THE DETROIT JOURNAL team



won all the games it played, and in the two games against the Chicago *Mail* boys, won an elegant championship banner, the \$150 silver cup offered by Mr. N. S. Wood, the newsboy's favorite actor,

and the title or champion newsboys' club of the world.

In 1888 THE DETROIT JOURNAL carried its novel plan still further, and astonished the base ball traternity by challenging the newsboys of the United States to combat for the title, cup and banner. The season opened in Buffalo, June 1. THE JOURNAL'S team was made up of B. Dinsmore, C. Gallagher, I. Cohen, B. Cohen, E. Daisey, C. Kellogg, R. Sheehan, Tom McDonald, A. Downer and F. Spranger, with F. H. Wakefield as manager and H. C. Brearley as treasurer. The boys were royally received everywhere, and more honors were showered upon them than on any league club that ever traveled. They were introduced to the mayors of every city that they visited, and to Governor Hill, of New York State.

Games were played with the Boston Globe, New York World, Brooklyn World, Philadelphia Call, Pittsburg Leader, Cleveland Plain-Dealer, Rochester Post Express. Albany Press and Knickerbocker, Syracuse Herald and Buffalo News. After their victorious season the Chicago Mail was invited to send a newsboy team to Detroit for a game. The Chicago Mail boys came confident of victory, and made boast of what they were going to do with the little DETROIT JOURNAL boys, but they were defeated 25 to 4



# DAVID PATTERSON, Statuary, Monuments, Vaults,

ETC.

Granite or Marble, American and Imported.

442 FORT STREET WEST,

OESIGNS AND ESTIMATES FURNISHED ON APPLICATION.

DETROIT, MICH.

ESTABLISHED 1868.

#### To the Public:

I have been in business since 1868, and have earned the reputation of furnishing the best class of granite work in the State; a reputation I shall endeavor to maintain in the future. I am prepared to furnish any description of Cemetery Work, from \$25.00 to \$25,000, in any granite or marble, at the lowest possible price consistent with a fair profit and a complete guarantee.

Respectfully,



DAVID PATTERSON.

#### The Journal Not An "Organ."

THE DETROIT JOURNAL is an independent paper. This does not mean that THE DETROIT JOURNAL is neutral. Far from it. It does mean that THE JOURNAL avoids the gall and the bitter-



ness of the party organ; that it treats every question on its merits; that its one aim is to tell the truth, the whole truth, and nothing but the truth about every man who comes under public notice, and about every measure that comes up for public discussion.

In the heat of party conflict, when the organs are exaggerating the merits of their own side and slighting the merits of their opponents, THE JOURNAL gives without bias or prejudice the facts in the case, believing that what readers want is, first of all, absolute truth, so that they may form their own opinions.

THE JOURNAL'S trusty correspondents and able editorial writers keep the public informed on all matters of public interest; and the paper aims to form public opinion by giving all sides of a matter in its news columns, and then discussing the question in its true bearings.

# Detroit Journal

#### ADVERTISING RATES.

Advertisements of Wants, To Rent, For Sale, etc., will be inserted under classified headings as follows:

Number of Words.	One time.	Two times.	Three times.	Four times.	Five times.	Six times.	Seven times.
15 or less	<b>\$.15</b>	\$.27	\$.39	<b>\$</b> .51	<b>\$.6</b> 3	\$.75	\$.87
16 words	.16	.28	.40	.52	. 66	.76	,88 .95
17 words	.17	. 80	.43	.56	.63	.82	
18 words	,18	. 32	.46	.60	.74	.88	1.01
19 words	.19	.34	.49	.64	.79	.94	1.08
20 words	.20	.85	.50	.65	.84	.95	1.10
21 words	.21 .22	.37	.58 .56	.73	.89 .90	1.01	1.17
22 words	.23	. 41	.59	.77	.95	1.07	1.31
24 words	.24	.42	.60	.78	.96	1.13	1.32
25 words	.25	.44	.63	.82	1.01	1.20	1.39
26 words	.26	.46	.66	.86	1.06	1.26	1.46
27 words	.27	.48	.69	.90	1.11	1.32	1.58
28 words	.28	.49	.70	.91	1.12	1.83	1.54
29 words	.39	.51	.73	.95	1.17	1.39	1.61
30 words	.30	.53	.76	.99	1.22	1.45	1.68
31 words	.31	.55	.79	1.03	1.27	1.51	1.75
32 words	.32	.56	.80	1.04	1.28	1.52	1.76
33 words	.33	.58	.83	1.08	1.33	1.58	1.80
34 words.,	.34	.60	.86	1.12	1.38	1.63	1.90
35 words	.35	.62	.89	1.16	1.43	1.70	1.97
36 words	.36	.63	.90	1.17	1.44	1.71	1.98
87 words	.87	.65	.93	1.21	1.49	1.77	2.05
38 words	.38	.67	.96	1.25	1.54	1.83	2.12
39 words	.39	.69	.99	1.29	1.59	1.89	2.19
40 words 41 words	.40	.70	1.00	1.30	1.60	1.90 1.96	2.26 2.27
41 words	.41 .42	.72	1.08	1.34	1.65	2.02	2.30
43 words	.43	.74	1.06	1.38	1.70	2.08	2.41
44 words	.44	77	1.10	1.43	1.76	2.09	2.42
45 words	.45	.79	1.13	1.47	1.81	2.15	2.49
46 words	.46	.81	1.16	1.51	1.86	2.21	2.56
47 words	.47	.83	1.19	1.55	1.91	2.27	3.63
48 words	.48	.84	1.20	1.56	1.92	2.28	2.64
49 words	.49	.86	1.23	1.60	1.97	2.34	2.71
50 words	.50	.88	1.26	1.64	1.02	2.40	2.78
Compound words count			nd ever			<del> </del>	

. Compound words count two words, and every abbreviation counts the same as a full word. Less than 14 words count as 14.

Those desiring mail addressed in care of THE DETROIT JOURNAL can do so free of charge. Secure a check to guarantee delivery of mail.

In every case the money must accompany the order.

SATURDAY ADVERTISING FREE.

#### The Four Coldest Days.

THE interest developed by THE DETROIT JOURNAL'S Hottest Days' Prize subjects that THE matter through the information on the perature.

directed so much attention to weather Journal was induced to carry the year in order to bring out all possible subject of the yearly extremes of tem-

offered to the person or persons who should name the four coldest days of the present winter. Immediately the readers of THE JOURNAL, and also people all over the country, to whom the Associated Press had conveyed the information that such a prize was offered, began to deluge the office with their guesses.

Accordingly a prize of \$1000 was

The time for receiving guesses ended December 1, and the matter will be decided in April.

Among the important and interesting facts developed by the competition were the comparisons of Detroit weather for the past seventeen years as shown by the records of the Detroit Signal' Station. A table prepared by Sergeant D. T. Flannery, the observer in charge, showed that the lowest that the temperature has gone in seventeen years was on December 15, 1872 - 24 degrees below zero. The winter during which the mercury made the least descent was that of 1882, when the coldest day, December 8, showed 1.8 above zero. According to the same computation January 7 or 8, 1889, ought to be the coldest day of the year, with a temperature of 8.5 below zero.

An interesting feature of this competition was the large number of postal-card illustrations sent to THE DETROIT JOURNAL by amateur artists throughout the State, many of which were published from week to week in its columns.

1843.

1889.

THE

### MUTUAL LIFE INSURANCE 60., OF NEW YORK..

RICHARD W. McCURDY, President.

Assets, \$124,000,000.00.

#### STANDS FIRST IN RANK AMONG FINANCIAL INSTI-TUTIONS OF THE WORLD.

#### THE LARGEST, SAFEST, AND BEST Company in the World.

THE FINANCIAL results obtained by the Mutual Life Insurance Company have never been equaled by any other company. It has returned to policy-holders over \$267,000,000.00 in the forty-six years of its existence, of which more than \$79,000,000.00 have been for Dividends.

Its weekly reports of death claims paid show that for each dollar of premium received it returns, on the average.

from \$2.00 to nearly \$4.00.

Its twenty payment Life twenty year Distribution policy, is the best plan ever offered an insuring public. Under this plan the insured does not have to die in order to win.

Its policies are simplicity itself, no restrictions of

any kind.

The history of the Company is such that the policyholders can point to its record as a guarantee for the fulfillment of its promises.

For further information please call on or write to

#### FERGUSON & GRANT, Gen'l Agents.

For Michigan, Indiana and Wisconsin.

DETROIT. MICH.

HUGO BOETTCHER, Special Agents for Detroit. JOHN W. CHESTER.

#### The Three Hottest Days.

EN. GREELY, chief of the U.S. Weather Bureau, having been so rash as to advise the people east of the Mississippi to take their vacations between the 14th and 15th of July, in



order to escape the hottest weather, The Detroit Journal, to test the possibilities of predicting the weather of future months, offered \$500 to the person who would name the three hottest days of 1888. Over 6000 guesses came from all parts of the country and from all conditions of men and women; but nobody guessed the correct days, though one guesser was correct for 22 days. To show how much

a matter of luck the guessing was, it may be stated that a St. Louis paper, following in The Journal's wake, divided its prize among five correct guessers, though there were not more than 2000 or 3000 guessers.

THE DETROIT JOURNAL came within one-half of a degree of having to pay the sum of \$500 to S. L. Epperson, 144 Jones St., Detroit, who guessed June 17, July 11, and August 3. This guess held good from Friday, August 3, till Monday, August 27, when it was found that on Sunday, August 26, the thermometer at the United States Signal Station in Detroit had registered 91 degrees. The three hottest days of the summer were: June 17, 94.2 degrees; July 11, 91.5 degrees; August 26, 91.0 degrees.

# JOHN B. PRICE,

TYPE, PAPER, AND PRINTERS'
SUPPLIES

Special Agent American Type Founders' Association. Farmer, Little & Co,'s Type in stock.

123 Jefferson Avenue,

DETROIT, MICH.

TELEPHONE NUMBER 900.

# ARTHUR & PHILBRIC, Photographers.

RTISTS
IN
EVERY
BRANCH
OF
PORTRAIT
WORK



WE
MAKE
A
SPECIALTY
OF
CHILDREN'S
PORTRAITS.

204 and 206 Woodward Ave., DETROIT.

Branch Houses: Toledo and Grand Rapids.

LOW PRICES,

w. H. SWAIL, Job \* Printer,

28 West Congress St.

COMMERCIAL PRINTING A SPECIALTY.

Wedding Invitations, Announcements, and Cards, Bills of Fare, Programmes, &c.,

NEATLY PRINTED AT REASONABLE RATES,

For Sale.

A Line of the Richmond

Co.'s Law Blanks all

#### The Floral Exhibition.

DURING the coming month of April the first Flower Show ever held in Detroit will take place at the Detroit Rink. The florists of the city are making special preparation for displays that will surpass anything ever yet seen in Michigan. The ladies



of various charitable organizations have taken hold of the matter with great avidity. Young ladies in gay costumes will have flowers for sale at pretty booths.

All the arrangements for the Flower Show have been made by THE DETROIT JOUR-NAL, and all the profits of the enterprise will be divided among the various charities which have interested themselves in the matter.

At an enthusiastic meeting held at the Young Men's Christian Association building, November 24, 1888, the ladies representing leading charitable institutions placed the active management of the Flower Show in the hands of

William H. Brearley, general manager.

Fred H. Farnsworth, secretary.

Frank D. Taylor, treasurer.

THE JOURNAL guaranteed that the organizations which interested themselves in the matter should not be under any expense further than what they might voluntarily assume in connection with the booths.

#### The Leaders in Style.



A SUIT FROM THE JOB LOT.

This young man is supposed to be happy.

He wanted a suit of clothes and was drawn in by a free watch advertisement.

What a fit!

We hope the watch will keep good time.

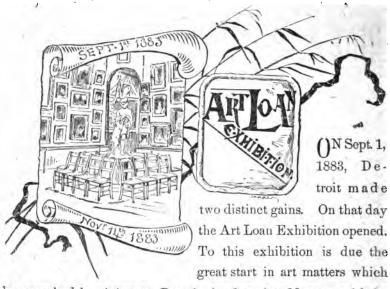
We are not in the watch or chromo business, but when it comes to an elegant fit we are there.

For the best work and fullest value we cannot be surpassed by any house in the city.

Respectfully,

I. H. LESHER.

#### The Art Loan and "The Journal."



has resulted in giving to Detroit the fine Art Museum with its endowment, which the people of the State have just begun to enjoy.

On the same day The Detroit Journal sprang into being. The people of Michigan recognized the new comer as giving promise of the clean, bright, newsy paper which in due time it was to become. Like the vast majority of such enterprises, there were storms and vicissitudes attending its early years; but soon it came into the hands of those who were capable of realizing its possibilities; and it has steadily advanced until now, with its Associated and United Press dispatches, its able editorial and local staff, and its army of special correspondents, The Detroit Journal ranks as the most influential and newsy paper in Michigan. It is a paper that prints all the news without attempting to be sensational. It does not make a practice of printing something one day which it has to take back the next day. The Journal is right, newsy, clean, and to be relied on.

THE

# Flint & Pere Marquette R. R.

Is the Direct Route Between

#### DETROIT

AND

Holly, Flint, Farwell,

Evart,

Saginaw,

Reed City,

Bay City,

Baldwin,

Mt. Pleasant,

Ludington,
Manistee.

Clare,

Through Parlor Car Service, on day trains, charge only 25 cents extra

between Detroit and Bay City, and 50 cents extra between Detroit and Manistee.

Sleeping Car Service, daily, between Saginaw Valley Points and Detroit and Toledo, Berths, \$1.00; also daily to and from Chicago, Berths, \$2.00.

### "Ludington Line Steamers,"

(F. & P. M.)

Daily during season of navigation, between Ludington, Mich., and Milwaukee, Wis., the F. & P. M. western Termini, making connections with through trains east and west.

General Offices,—East Saginaw, Mich.

D. EDWARDS,

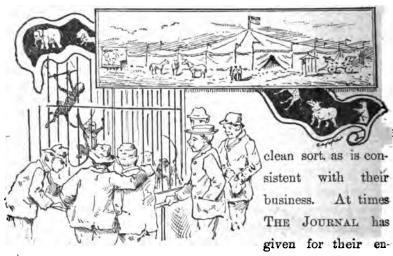
SANFORD KEELER,

Ass't Gen'l Manager.

Superintendent.

#### The Newsboys at the Menagerie.

THE DETROIT JOURNAL management has always believed that the newsboys, those bright and enterprising circulators of the record of the world's doings, should have as much pleasure, of a



joyment and benefit, games and base ball exhibitions, and on two occasions the boys were allowed to sell tickets and put the entire proceeds in their pockets.

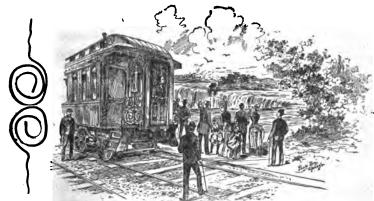
On one occasion THE JOURNAL had a special menageric performance given for them, at which more than 1500 boys saw the animals free of charge. The success of this forenoon show was very great, and the boys were able to enjoy it without losing any of the time they devote to their business. In no plan that is for the benefit or the pleasure of the newsboys has THE JOURNAL been backward.

# MICHIGAN CENTRAL R.R.

"The Niagara Falls Route."

VESTIBULE LIMITED.



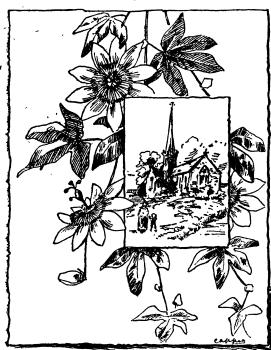


THE steady and continued improvement of the Michigan Central and its through car service, running between Chicago, Toledo and Detroit, and New York, Boston and the East, as well as the principal cities of Michigan and Canada, keep it, as heretofore, at the high-water mark of railroad service. The company's own shops are constantly turning out a variety of coaches of the finest construction and finish, with all the latest improvements, including vestibuled platforms, steam heating, revolving and extension chairs, ventilating apparatus, and numerous other devices that contribute to the comfort and safety of the passenger. The upholstering is of the richest silk, plush, velvet and leather, and the decoration in the most refined taste. The Wagner Palace Car Company is also constantly improving its service on the line, by the addition of new vestibuled sleeping and parlor cars that represent the highest degree of perfection yet reached in car construction, finish and decoration. Nothing is spared to obtain the maximum of comfort and even luxury, and ingenuity, mechanical skill and artistic taste would seem to have reached their utmost development

O W. RUGGLES. General Passenger and Ticket Agent. W. R. BUSENBARK, Ass't General Passenges Agent. GEO. E. KING. Ass't General Ticket Agent. C. A. WARREN, City Passenger Agent, Detroit, Mich.

#### Observance of the Sabbath.

THE DETROIT JOURNAL believes in the observance of the Sabbath. It is the only daily in Detroit which publishes no Sunday edition. On Saturday a double sheet, eight pages in size, pro-



vides a vast amount of carefully selected and well edited reading matter. So carefully is this matter prepared that, without additional expense to its read: ers, THE JOURNAL is able to give more good stories, brighter for eign, metropolitan Washington and gossip, and a larger amount of

real fun and humor than any other paper in the city; and discussions of topics of real interest are presented with that condensation which interests the reader.

Hence it is that when the reader has finished his Saturday evening Journal, he has covered the news, sporting, theatrical and literary fields; has found out what people are talking about the world over; has laughed over the best of the week's jokes, and so is ready to go to a quiet rest, and wake up ready for a profitable Sabbath, unvexed by the repetitions of Saturday's news in the Sunday papers.

M.W. O'BRIEN, Pres. ANTON PULTE, V-Pres. F. A. SCHULTE, 2d V-P. S. B. COLEMAN, Cashier.



Paid-up Capital, \$500,000 Surplus, . . 100,000 Stockholders Liable for an Additional, 500,000

A Savings Book Issued and Interest at 4 per cent. allowed on deposits of One Dollar and upwards.

Letters of Credit furnished. Drafts for sale on all the Countries of the Old World in sums of £1 and over.

S. E. COR. CONGRESS AND GRISWOLD STS.

SIDNEY D. MILLER, Pres. THOS. FERGUSON, Vice-Pres. E. C. BOWMAN, Cashier.

THE

# DETROIT SAVINGS BANK;

N. E. Corner Griswold and Larned Streets.

Established 1849.

Re-Organized 1871.

#### CAPITAL, \$200,000.

DIRECTORS:

JAMES McMILLAN, THOS. FERGUSON, W. K. MUIR, ALEX. CHAPOTON, SR. F. B. SIBLEY, JAMES E. PITTMAN, GEORGE JEROME, GEORGE HENDRIE. SIDNEY D. MILLER.

Deposits of One Dollar and Upwards Received.

And Interest allowed on balances from \$5.00 upwards, subject to rules and regulations of the bank.

# Money to Loan on Real Estate, Etc., at current rates of interest;

E. C. BOWMAN, Cashier.

### SIEGE OF KNOXVILLE.

AND SIEGE OF KNOXVILLE, by W. H. Brearley, of the 17th Michigan Infantry. Address,

W. H. BREARLEY, Detroit Journal.



This man and his good wife are enjoying the proceeds of a \$25,-000 New York Life Tontine Investment policy. The policy has fulfilled its mission of protection to the family, while there was necessity for such protection, and now it proves a blessing to declining years. As an investment it has net over nine per cent compound interest after deducting what it would have cost him to secure bare protection for family during the past fifteen years.



This man was prevailed upon not to invest in one of the NEW YORK LIFE TONTINE INVEST-MENT POLICIES, but to take one payable at DEATH ONLY and then invest the balance of his money where it would pay him better. (?) The argument of "his not needing a guardian" prevailed. Need for protection has ceased, as his children are all dead. He has failed in business, and now realizes the mistake he made in not providing for old age under the investment plan, as provided by the New York Life policies, and also realizes that there can be no object so pitiable as old age without money.

C. W. MOORE, 10 Lafayette Ave.

Not for a Day, but for All Time.

# MUTUAL RESERVE FUND LIFE

ASSOCIATION.

INCORPORATED UNDER THE LAWS OF THE STATE OF NEW YORK.

#### POTTER BUILDING, 38 PARK ROW, NEW YORK,

The Most Successful Life Insurance Company in the World.

FURNISHES LIFE INSURANCE AT ONE-HALF THE USUAL RATES.

\$2,500 000.00

\$1,850,000.00

Assets.

Cash Surplus Emergency Fund.

A FREE POLICY. A PAID UP POLICY.

A NON-FORFEITABLE POLICY. AN INDISPUTABLE POLICY.

A CASH SURRENDER VALUE POLICY.

Paid to WIDOWS

براد فورني

\$5,800,000

and ORPHANS.

**\$200,000.00** 

Deposited with Insurance
Department of
New York.

\$150,000.00

Deposited with Insurance Dept. of Canada and the Bank of England.

THE CENTRAL TRUST COMPANY OF NEW YORK

TRUSTEE OF THE TONTINE RESERVE OR EMERGENCY FUND.

EDWARD B. HARPER, President.

MICHIGAN DEPARTMENT, 10 Michigan Ave., Detroit.

H. R. JOSSELYN, Manager.

#### THE MUTUAL RESERVE FUND LIFE ASSOCIATION

Has been officially examined, its management endorsed, its books and accounts certified to be correct.

ITS

HONEST DEATH CLAIMS
HAVE BEEN

PAID IN FULL.

Official Examination has been made by the Insurance Department of New York, Rhode Island, Wisconsin, Minnesota, Ohio, Michigan, Missouri, and by Hon. Elizur Wright, Ex.-Ins. Comm'r of Mass.

The Last Examination Completed by the Missouri Insurance Department MAY 25, 1888.

#### SCHEDULE OF RATES

FOR ADVERTISING IN

#### he Detroi dourna

Issued every afternoon, except Sunday. Three editions dally.

Four pages except Saturdays, 8 pages on Saturday. Eight columns to the page, width of column, 12 ems pica; length, 21½ inches.

Basis of Measurement.—All matter, whether reading or display, solid agate, 14 lines to

the inch.

#### All Cuts Must be Blocked on Solid Metal Base. **DISPLAYED MATTER-Time Contracts.** Rates per agate line, each consecutive insertion.

#### 2 months (52 insertions)..... 51/2 cts. 1 time, per agate line..... 9 " 78 " " 104 " 4 times " 44 44 4 104 R ..... 41/2 \*\* 156 1 month (26 insertions)...... 6 234 12 months (312 insertions), 3 cts. . Space Discounts on Time Contracts. 28 lines...... 5 per cent. " (3 ") 10 " " (4 ") 15 " " to 150 lines (5 to 10% inches, 1/2 column) 20 " 42 56 70 PREFERRED POSITIONS. Advertisements inserted E. O. D., 34 of computed daily rate. "T. A. W., 14 " " " " "

#### SPACE CONTRACTS.

Space to be used within one year from date of contract, and to be inserted at times and in quantities subject to advertiser's instructions, provided that the publisher's convenience, as to space, shall at no time be encroached upon. Rates per agate line in quantities of—

3,000 lines. 6 cts. 8,000 lines. 5 cts.
5,000 " 15,000 lines. 444 "

15,000 lines. 4 cts.

PURE READING MATTER, When set in body-type of the paper, 

#### ADVERTISING NOTICES,

When set in agate or nonpareil, at the foot of any reading matter column, when and as the publisher may see fit. 

"Liners," Marriage, Death and Meeting notices, one cent per word first insertion, and 4 cent per word for each succeeding consecutive insertion. Nothing counted less than 14

All contracts for advertising from elsewhere than the city of Detroit will be made through our EASTERN OFFICE, ROOM 71 TRIBUNE BUILDING, NEW YORK. F. E. DUFFY, Manager Foreign Advertising Department.

#### THE DETROIT JOURNAL CO., Publishers.

E. H. AYER, Detroit,

W. H. BREARLEY.

Manager Advertising Department.

President.

#### HOW TO JUDGE OF VALUE.

The value of a paper as an advertising organ depends mainly upon the extent, class and quality of its circulation.

Class and quality are as important as numbers. For instance, a circulation of one thousand in one class might be as valuable to some advertisers as tens of thousands in a different class. The aim of the advertiser is to make his name and his wares well known amongst those who are in want of what he has to sell, and who may be likely to buy from him. He should therefore select papers that are known to circulate amongst those people whose wants he caters for.—The Advertisers' Guardian:

N MEDICINE, quality is of the first importance at MILBURN & WILLIAMSON'S,
Progressive Druggists, and Dealers in Surgical Instruments, Sick Room and Nursery Supplies. 81 WOODWARD AVENUE, DETROIT.

#### "SILENCE IS GOLDEN."

#### TO OUR 8,000,000 CUSTOMERS.

E present for your inspection and approval at the opening of the year '89, our New Silent Oscillator and New Silent Vibrator on New and charming Furniture, unequaled in design and finish by anything yet offered. New and delightful attachments. Call and see a sewing machine that is so constructed as to be capable of serving the purpose of the most delicate lady in the land, and at the same time strong enough and swift enough to use in a factory, by power, for ten years at 2,000 stitches per minute.

#### ESOLD ON EASY PAYMENTS.

Do not listen to persons claiming to offer a machine "just as good" as the Singer. You have proved, time and again, the fallacy of all such claims.

#### THE SINGER MANUFACTURING CO.,

Sewing Machine and Fashion Rooms, 244 Woodward Avenue. Correspondence solicited.

TF YOU desire an investment Policy, apply to the "HOME LIFE," of New York, for the Dividend Endowment or Return Premium Dividend Endowment, where the premiums, in the event of death, are paid to the beneficiary in addition to the face of the Policy. Or in event of living out the period the full amount of the Policy is payable in cash. For information apply to H. HASKELL, State Agent, 19 McGraw Building.

## BREARLEY'S IMPROVED CHURCH PLANS.

By arrangement with W. H. Brearley, of Detroit, Mich., (the designer of these plans), the American Baptist Publication Society become the sole agents, and all orders should be addressed to them.

Each of these Plans consists of a full set of working drawings, architect's specifica-tions, and builder's bill of material. They are ready to be put in the hands of a builder at once.

Any architect would charge \$75 for a set of drawings that are no more complete. Either of the designs given below can be procured for \$6. The plans are copyrighted, and must not be copied without permission. The \$6 charged for right to use is for each building upon this design. PRICE OF ONE SET WITH RIGHT TO USE, \$6.

#### IN ORDERING STATE WHICH PLAN IS DESIRED.

Design	1,	Frame,	Seats	about	225,	Costs	about	\$1,500
•••	2.	**	**	••	<b>300.</b>	••	••	2.000
44	3.	44	66	**	325.	**	**	2.500
44	4,	44	46	44	450.	44	44	3.500
66	5.	Brick.	44	44	400.	**	44	7.000

Any one of the five designs will be sent for examination for \$1.00, the design to be returned if not used. If adopted, \$5.00 additional must be paid for the right to

We are pleased with the plan of these designs, and believe they can be made very helpful to churches desiring to build good houses of worship. The plans are cheaper houses of worship. The plans are cheaper than those of an architect drawn for a special church.-Religious Telescope, Day-

The plan is attractive, unique economical of space, and cheap of execution. - Pres-hyterian, St. Louis.

We heartily commend them as affording mexpensive and attractive features not elsewhere to be secured. - Churchman, Daven-

The novelty of this design is quite pleasing.—Baptist, Dallas, T-x.
The plan is good.—Christian Messenger,
Halifax, Nova Scotia.

We are well placed with the design,-

Something new, cheap, and convenient. Methodist Advance, Goldsboro, N. C.

Just what is wanted: ample and conven-

fent,-Christian Advocate, Hamilton, Ont. A new arrangement of rooms.-Christian

Mirror, Portland, Me.
A much needed improvement,—Highway,

Nevada, la.

It is an attractive style of architecture, and has several special advantages in its manner of sitting and arrangement of rooms.—Zion's Herald, Boston.
The arrangement is the finest we have

seen.—American Baptist, Louisville, Ky.

There is fine taste in the plans and a very churchly effect is produced by the architecfural skill, which is so plainly manifested in making the proportions of a square, usually undesirable, really attractive.-Churchman, Topeka, Kan.

of societies proposing to build, for, in some respects, they are not surpassed by any that we have seen.—Central Christian Advocate, St. Louis W. H. Brearley, of Detroit, Mich., has designed and copyrighted a series of church

plan, on a unique, but simple, arrangement, which ought to commend them to favor—Illustrated Christian Weekly, N. Y. Some excellent suggestions might be got from the plans prepared and copyrighted by W. H. Brearley.—Wesleyan, Halifax,

They are certainly worthy of the attention

Nova Scotia.

The plans are full in every detail, even to the cost of material, and are worth the close scrutiny of every building committee.

—American Hebrew, N. Y.

The plan utilizes all the space to advantage and makes a protty huilding. Oh

tage, and makes a pretty building.—Observer, St. Louis.

The designs are admirable.—Church Advocate, Harrisburg, Pa.

The arrangement of the audience room and its seating capacity is excellent.—Observer, Louisville, Ky.

They are certainly worthy of the attention of societies proposing to build, for, in some respects, they are not surpassed by any that we have seen. We commend them.—Methodist, Topeka, Kan.

They make a good improved to the statement of the second s

They make a good impression.—Presby-terian Journal, Philadelphia.
The principal object of the designer seems to be the economizing of space.—Missionary World, London, Out.
We are favorably impressed with it. The

lan for the audience room, class room, and library is peculiar.—Evangelical Messenger, Cleveland, O.

's...

Address all orders to the

# BREARLEY'S SYSTEMATIZER.

### A Compact, Convenient, and Perpetual Systematizer of Office Work.

ESPECIALLY ADAPTED TO THE USE OF PUBLISHERS,

EDITORS and

CANVASSERS,

And accurate management of any Newspaper's

ADVERTISING DEPARTMENT.

The book is briefly described in the following clippings fr. m

### PRESS NOTICES.

Its Advantages are Manifest.—"Mr. W. Brearley, of Detroit, Mich., has made a valuable contribution to business-house economy by the invention of a book to facilitate the keeping of memoranda. It contains leaves corresponding to the number of days in the year, a vary clayer and simple method of the year, a very clever and simple method of indicating the position of the several months being adopted. The leaves, which are of tough, white-brown paper, are paged so that the date of the month serves for the number. The ideal of the month serves for the number. the date of the month serves for the number. The design is that the book shall be used for keeping any notes, to which reference is to be made at a given date, in their proper place without the labor of copying being entailed. Its advantages over the ordinary memorandum or engagement book are manifest. It dum or engagement cook are mannest. IT CAN BE USED YRAR AFTER YNAR for the same purpose, it being only requisite to remove the loose memorada of one twelvemonth to make room for those of the following; it is safe, nothing but gross carelessness being sufficient to bring about the loss of any notes; and it is remarkably cheap for an article of such worth."—Geo. P. Rowell & Co.'s Advertising Gazette.

Simple and Convenient.—"W. H. Brearley, of this city, has recently copyrighted a contrivance that will be of great practical value to publishers, lawyers, bankers, and other classes of business men who have business papers to file, requiring attention at fixed dates in the future. It consists

of a book of 365 leaves, corresponding to the days of the year, indexed at the margin, so that any date can be readily turned to. Strip are inserted between the leaves to admit of are inserted between the leaves to admit of any amount of loose memoranda being placed at any date, and the binding of the leaves prevents them from losing out. Having gone through the year, the user can turn to the beginning again, and so on perpetually. The invention is very simple, convenient and comprehensive, and it will, no doubt, have a wide sale."—Detroit Evening News.

A Perpetual Diary.—"W. H. Breariey, of this city, has invented a sort of perpetual diary for systematizing office work. It conof this city, has invented a sort of perpetual diary for systematizing office work. It contains 365 pages, with the months and days thereof so arranged that they can be instantly turned to. It is compact, convenient and useful."-Detroit Free Press.

#### DIRECTIONS FOR USING.

Devote Some Drawer in your Office to its use, where it can have the protection you give to your other books or files; open the book to any date desired and place your memoranda of bu-iness or engagement letters to be answered and work to be attended to, LOOSE BETWEEN THE PAGES (they will not slip out), and when the time arrives your work for the day cannot be everloyed. the day cannot be overlooked.

Consult the Book Each Day, as you would a diary, and in a short time you will find an accumulation of memoranda awaiting attention each day. Do not write upon or paste anything on the pages.

The Book will be Good for Years till worn out, and at any time of the year will serve the ordinary purpose of a diary For A YEAR FROM THAT DATE.

Over 2,000 Separate Slips or pieces of copy can be accommodated in the book, much out the least danger of losing out, if any out the least danger of handling. The book should be left on its side, and should not be stood up on end.

Orders will be filled at the "Cash with Order" rate of \$3.50 each, the books to be carefully packed and mailed. In ordering address

W. H. BREARLEY.

DETROIT JOURNAL,

DETROIT, MICH.

# The Plankinton,

Hall and Detroit Opera House. The most central location in Detroit, with rates from two dollars and fifty cents per day. The hotel has new furniture, elevator, steam heat, electric light, call bells, and the return, and fire alarms, which make it the most convenient and comfortable hotel in Detroit.

JOHN O. PLANK,
Proprietor

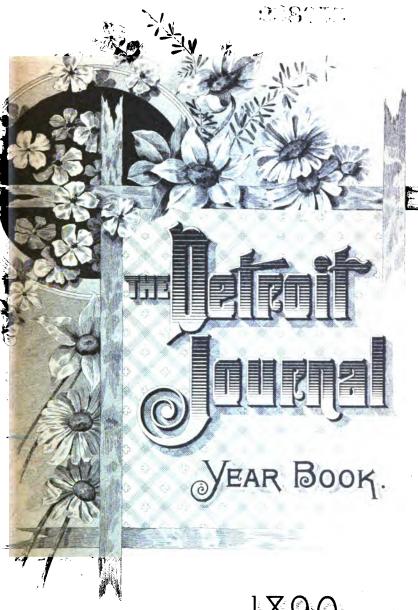
# Plank's Grand Hotel,

Island of Mackinac, Mich.

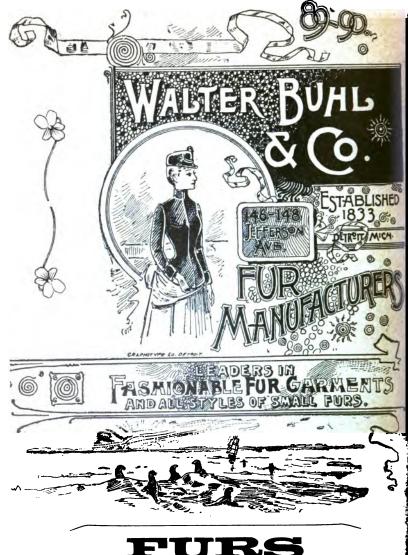
ception. This mammoth hotel has all the latest modern improvements known for hotels, and with accommodation for 1600 guests, with the best band in the State to enliven the balcony and lawns, and finest drives in the country, make it a very delightful summer resort.

JOHN O. PLANK

Prope



1890.



AND

# Fur-Lined OVERCOAT

CAPS, GLOVES, ROBES, Etc.

THE

# DETROIT JOURNAL

# YEAR-BOOK

For 1890.

No. 2.

PUBLISHED BY

The Detroit Journal Company,

DETROIT, MICHIGAN.

Copyrighted, 1890, by the Detroit Journal Company.

in

# PUBLIC LIBRARY

ABTOR, LENOX AND TILDEN FOUNDATIONS. 1902

#### Index.

GENERAL.	Longitude, width of de-	Weights and measures 27
Abbreviations, hints on 44	grees 46	Wit and wisdom 54
Acres, measurement of 27 Ages of majority 47	Marriage and divorce20, 32 MICHIGAN:	Woman suffrage 26 Government 44
Amusements, puzzles, etc. 50	Chata	Words in dictionaries 47
Animals, ages of 43	Military department 66 Presidential elections 67 Gubernatorial 68 Congressional 70 Elections of 1889 71 State institutions 73 Soldiary Societies 78	Writers, rules for 36
Ballot reform laws 19	Presidential elections 67	Pen-names of female 39
Barns, rules for building. 29	Gubernatorial " 68	Young man, success of 41
Barometer, natural, etc. 12	Congressional 70	TI I TIOMD AMTONO
Bible, new page about 85	State institutions 71	Bethel booth116
Boiling-points 46 Boxes, capacity of 27		Breitmeyer's room128
Bridges and tunnels 43	Legislation of 1889 78	Calendar for 1890102
Calendar, Astronomical 3	Legislation of 1889       73         Sailing distances       74         Sault ship canal       74         Post-offices       75, 102	Casino Tabernacle hooth 104
Monthly	Sault ship canal	Composite photograph of Detroit Journal staff101
Civil service system 19	Mines 40	D M Farry & Company's
Colors, interesting facts. 30	Mines	D. M. Ferry & Company's building
Colossi	Mountains, highest 46	Grace Hospital booth 104
Cookerv. some recipes 52	Naturalization 16	Gamble & Partridge's room
Copyright law	Nursing, hints for 51	room
Crime, statistics of 52	Ocean soundings 42 steamships 43	Hobrew Widow and On
Crosses	steamships	phan Society's booth 108
Date-line, international 11	Patent, how to get 17	Helping Hand Society.—
Death-roll of the year 94 DETROIT AND WAYNE Co.:	Pensions, how to get 23	Sweet Pea booth120
DETROIT AND WAYNE Co.:	Personal notes 38	Home for the Friendless
City government 81	Piano, care of 40	booth124
Licenses 82 Hack fares 82	Plants, high prices for. 44 Poets-laureate 40 Poor Richard's wise	Open Door Society Dem
County officers 83	Poor Richard's wise	sy hooth 110
Descriptive sketch 83	Words	Protestant Orphan Asv-
Descriptive sketch 83 Population of county 84	Population, statistics of 31 Cities of U. S 62	124   124   125   126
County elections 84	Cities of U.S	Roehm & Son's room122
City elections 85 Points of interest 86	Wayne county 84 Postal information 15	
City reilways 98	Dunataus stanos	Wayne Hotel126
City railways	Droom the	
Public Service 87	Railways, gauge of 43	Advertisements.
Public Service 87 Miscellany 88	Railways, gauge of	Advertising rates Dymporm
Public Service 87 Miscellany 88	Railways, gauge of 43 Record of the year 89 Scales for housewives 27	Advertising rates Dymporm
Public Service 87 Miscellany 88 Dominical letters 47 Drinks of all nations 24	Railways, gauge of 43 Record of the year 89 Scales for housewives 27 Ship canal, Nicaragua 44 Sault Ste Marie 74	Advertising rates Detroit JOURNAL
Public Service 87 Miscellany 88 Dominical letters 47 Drinks of all nations 24	Press, the 99 Railways, gauge of 43 Record of the year 89 Scales for housewives 27 Ship canal, Nicaragua 44 Sault Ste. Marie 74 Sneeches, etc., famous 37	Advertising rates DETROIT JOURNAL
Public Service 87 Miscellany 88 Dominical letters 47 Drinks of all nations 24	Sporting world, the 97	Advertising rates DETROIT JOURNAL
Public Service 87 Miscellany 88 Dominical letters 47 Drinks of all nations 24	Sporting world, the 97	Advertising rates DETROIT JOURNAL
Public Service	Sporting world, the 97 Statistics, curious	Advertising rates DETROIT JOURNAL
Public Service	Sporting world, the	Advertising rates DETROIT JOURNAL
Public Service	Sporting world, the 97	Advertising rates DETROIT JOURNAL
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 114
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 114
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Acad-
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 68, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Acad-
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for 46 Geography, pronouncing, 42 Governments of the world 46	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Tunstan, G. H 114 Edison Illuminating Co. 110 Ferguson & Grant 117 Gaines' Dancing Academy. 128 Gamble & Partridge 111
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for 46 Geography, pronouncing, 42 Governments of the world 46	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Telegraphs, Atlantic, and other 44 Thermometers 47	Advertising rates Detroit JOURNAL. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Tunstan, G. H 114 Edison Illuminating Co. 110 Ferguson & Grant 117 Gaines' Dancing Academy. 128 Gamble & Partridge 111
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for 46 Geography, pronouncing, 42 Governments of the world 46	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41	Advertising rates Detroit JOURNAL
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for 46 Geography, pronouncing, 42 Governments of the world 46	Sporting world, the 97 Statistics curious 33 Population 31, 62, 84 Crime 38 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40	Advertising rates Detroit JOURNAL
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 United States	Advertising rates Detroit JOURNAL
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Holy Land, distances in. 34 Horses, to tell age. 48 How to make a noon-mark 12	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Statistics 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40 UNITED STATES: Government 55	Advertising rates Detroit JOURNAL. 106 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Gaines' Dancing Academy 128 Gamble & Partridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 116 Land, Dr. C. H. 121 Land, Dr. C. 112 Land, Dr. C. 116 Meson & Pice. 1021
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Holy Land, distances in. 34 Horses, to tell age. 48 How to make a noon-mark 12	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular. 49 Telegraphs, Atlantic, and other 44 Thermometers. 47 Times, standard and local 12 Trains, speed of 41 Union generals, nicknames 40 UNITED STATES: Government. 55 Ministers abroad 57	Advertising rates Detroit JOURNAL
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 57	Advertising rates Detroit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 The 114 Edison Illuminating Co. 110 Gaines' Dancing Academy. 128 Gamble & Partridge 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Mutual Life Insurance Co. 119
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 United States: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 60 Area and population 61	Advertising rates Detroit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 The 114 Edison Illuminating Co. 110 Gaines' Dancing Academy. 128 Gamble & Partridge 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Mutual Life Insurance Co. 119
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 60 Area and population 61 Population of cities 62	Advertising rates Detroit JOURNAL. 106 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan. G. H. 114 Edison Illuminating Co. 110 Gerguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Partridge. 111 Graphotype Co., The 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Holy Land, distances in. 34 Horses, to tell age. 48 How to make a noon-mark 12 Immortals, the forty. 39 Interest laws and rules. 26 Internal revenue taxes. 18 Iron, wrought. 40 Kanaff, a new textile. 40 Kanaff, a new textile. 40 Kerosene lamps, rules for 29	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular. 49 Telegraphs, Atlantic, and other 44 Thermometers. 47 Times, standard and local 12 Trains, speed of 41 Union generals, nicknames 40 UNITED STATES: Government. 55 Ministers abroad 57 Presidents 58 Presidential elections. 60 Area and population. 61 Population of cities. 62 Indian population. 63	Advertising rates Detrioit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Cafe Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Paytridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service. 87 Miscellany. 88 Dominical letters. 47 Porinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Horses, to tell age. 48 How to make a noon-mark 12 Immortals, the forty. 39 Interest laws and rules. 26 Internal revenue taxes. 18 Iron, wrought. 40 Kensone lamps, rules for 29 Legal information. 25	Sporting world, the 97 Statistics curious 33 Population 31, 68, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 60 Area and population 61 Population of cities 62 Indian population 63 Millitary societies 64	Advertising rates Detrioit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Cafe Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Paytridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, nicknames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 60 Area and population 61 Population of cities 62 Indian population 63 Military societies 64 Armies of 64	Advertising rates Detrioit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Cafe Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Paytridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers. 47 Times, standard and local 12 Trains, speed of 41 Union generals, uicknames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidential elections. 60 Area and population. 61 Population of cities. 62 Indian population. 63 Military societies. 64 Armies of. 64 Voters in Michigan 16 Water, to test. 43	Advertising rates Detrioit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Cafe Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Paytridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Holy Land, distances in. 34 Horses, to tell age. 48 How to make a noon-mark 12 Immortals, the forty. 39 Interest laws and rules. 26 Internal revenue taxes. 18 Iron, wrought. 40 Kanaff, a new textile. 40 Kanaff, a new textile. 40 Kerosene lamps, rules for 29 Legal information. 25 Libel law, the new. 100 Libraries, books, and reading. 86 Limitation, statutes of. 26	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular. 49 Telegraphs, Atlantic, and other 44 Thermometers. 47 Times, standard and local 12 Trains, speed of 41 Union generals, nicknames 40 Unitred States: 66 Government. 55 Ministers abroad 57 Presidents. 58 Presidential elections. 60 Area and population. 61 Population of cities. 62 Indian population. 63 Military societies. 64 Voters in Michigan 16 Water, to test. 43 Weather prophecy 13	Advertising rates Detrioit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Cafe Swan 121 Detroit Literary Bureau, The 107 Dunstan, G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Paytridge. 111 Graphotype Co., The. 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world. 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Horses, to tell age. 48 How to make a noon-mark 12 Immortals, the forty. 39 Interest laws and rules. 18 Iron, wrought. 40 Kenosene lamps, rules for 29 Legal information. 25 Libel law, the new. 100 Libraries, books, and reading. 38 Limitation, statutes of. 26 Liduor legislation. 24	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uickmames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 61 Area and population 61 Population of cities 62 Indian population 63 Military societies 64 Armies of 64 Voters in Michigan 66 Water, to test 48 Weather prophecy 13 Signals 18	Advertising rates Detroit Journal. 105 Adamant Wall Plaster Co. 108 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 121 Detroit Literary Bureau, The 107 Dunstan. G. H. 114 Edison Illuminating Co. 110 Ferguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Partridge. 111 Graphotype Co., The 107 Howard Iron Works, cover opposite page. 128 Milburn, H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 113 Richmond & Harris, cover. opposite page. 128 Roehm & Son. 114 Smith, H. D. 108 Swall, W. H. 166 Swall, W. H. 166 Swall W. H. 166
Public Service. 87 Miscellany. 88 Dominical letters. 47 Drinks of all nations. 24 Per capita consumption 23 Driving-track, to lay off. 30 Electrical units. 47 Etiquette, points in. 42 Europe, military in. 44 Fads, recent. 42 Finger-nails, signs of. 40 Floral exhibition of 1890. 100 Foods for the sick. 51 Nutrition in. 41 Game, names for. 46 Geography, pronouncing. 42 Governments of the world 46 Grammar in rhyme. 48 Heights, artificial. 29 History of the World. 103 Holy Land, distances in. 34 Horses, to tell age. 48 How to make a noon-mark 12 Immortals, the forty. 39 Interest laws and rules. 26 Internal revenue taxes. 18 Iron, wrought. 40 Kanaff, a new textile. 40 Kanaff, a new textile. 40 Kerosene lamps, rules for 29 Legal information. 25 Libel law, the new. 100 Libraries, books, and reading. 86 Limitation, statutes of. 26	Sporting world, the 97 Statistics, curious 33 Population 31, 62, 84 Crime 32 Stockings, using old 48 Sun-time and clock-time. 12 Sunday-school lessons 34 Superstitions, popular 49 Telegraphs, Atlantic, and other 44 Thermometers 47 Times, standard and local 12 Trains, speed of 41 Union generals, uickmames 40 UNITED STATES: Government 55 Ministers abroad 57 Presidents 58 Presidential elections 61 Area and population 61 Population of cities 62 Indian population 63 Military societies 64 Armies of 64 Voters in Michigan 66 Water, to test 48 Weather prophecy 13 Signals 18	Advertising rates Detroit JOURNAL. 106 Battle Creek Sanitarium. 117 Breitmeyer, Jno. & Sons. 128 Buhl, Walter & Co., cover opposite page. 1 Café Swan 121 Detroit Literary Bureau, The 107 Dunstan. G. H. 114 Edison Illuminating Co. 110 Gerguson & Grant 119 Gaines' Dancing Academy. 128 Gamble & Partridge. 111 Graphotype Co., The 107 Howard Iron Works, cover opposite page. 128 King, Klugh & Co. 112 Land, Dr. C. H. 106 Mason & Rice. 121 Merritt Typewriter. 128 Milburn, H. J. 109 Mutual Life Insurance Co. 119 Peoples' Savings Bank. 107 Pingree & Smith. 118

# Detroit Journal Year-Book,

#### FOR THE YEAR 1890.

#### ASTRONOMICAL CALENDAR.

The year 1890 comprises to July 3 inclusive, the latter part of the 114th year of American Independence, and thereafter the former part of the 115th. It corresponds more or less closely to

The year 6603 of the Julian Period.

The year 7398-99 of the Byzantine Era.

The year 5650-51 of the Jewish Era, the year 5651 beginning at sunset September 26.

The year of the World (Ussher's chronology) 5894; in the Septuagint chronology, 7398-99.

The year 2666 of the Olympiads, or the first year of the 668th Olympiad, commencing in July, 1890.

The year 2648 since the foundation of Rome.

The year 2637 of the Era of Nabonassar.

The year 2550 of the Japanese Era,

The year 2202 of the Era of the Seleucidæ.

The year 1606 of the Era of Diocletian.

The year 1307-8 of the Mohammedan Era, or Era of the Hegira.

The year 219 of the Dionysian Period.

#### OTHER CHRONOLOGICAL CYCLES.

Lunar Cycle, or Golden Number	Roman Indiction
Jewish Lunar Cycle 7	Dominical Letter E

#### THE SEASONS (DETROIT TIME).

Vernal EquinoxSpring	begins.	March	20,	10 c	'clocl	x A. M.
Summer Solstice Summer	".	June	21,	в	"	A. M.
Autumnal EquinoxAutumn	" .	September	22,	9	64	P. M.
Winter SolsticeWinter	".	December	21,	3	**	P. M.

#### MORNING STARS.

MERCURY, Feb. 23 to May 5, June 24 to Sept. 2, and October 15 to December 26.

VENUS, till Feb. 18, and Dec. 3 to end of year.

EVENING STARS.
MERCURY, until Feb. 23, from May 6 to
June 23, Sept. 3 to October 14, and December 27 to end of year.
VENUS, Feb. 19 to Dec. 2.
JUPITER, till January 10, and July 31 to
end of year.

JUPITER, January 11 to July 30.

#### LEGAL HOLIDAYS IN MICHIGAN, 1890.

Wednesday, January 1 — New Year's Day.
Saturday, February 22 — Washington's Birthday.
Friday, May 30 — Decoration Day.
Friday, July 4 — Independence Day.
Friday, November 28 — Thanksgiving Day.
Thursday, December 25 — Christmas Day.

#### FIXED AND MOVABLE FESTIVALS, Etc., 1890.

EpiphanyJan.	6	Ascension—Holy Thursday
Septuagesima SundayFeb.	2	Pentecost-Whit-Sunday " 25
Quinquagesima—Shrove Sunday "	16	Trinity Sunday June 1
Ash Wednesday "	19	Corpus Christi
First Sunday in Lent "	23	St. John's Day " 24
St. Patrick's DayMar.	17	Michaelmas DaySept. 29
Annunciation—Lady Day "	25	First Sunday in Advent
Palm Sunday	30	Christmas Day Dec. 25
Good FridayApri	1 4	·
Rester Sunday	R	EMBER DAYS.
Low Sunday "	18	Feb. 26, 28; Mar. 1; May 28, 80, 31; Sept. 17, 19, 20; Dec. 17, 19, 20.
Rogation Sunday May	11	17, 19, 20; Dec. 17, 19, 20,

#### APPULSE AND ECLIPSES FOR 1890.

There will be a Lunar Appulse this year, and three Eclipses,—two of the Sun and one of the Moon,—two of these phenomena visible in the United States, and two invisible.

I. A LUNAR APPULSE, or close contact of the Moon with the Earth's shadow, Monday and Tuesday, June 2-3. In favorable states of the atmosphere the Moon may seem to enter the Earth's shadow and appear in partial eclipse. The Moon will be visible throughout North and South America and upon the adjacent waters. The time of nearest approach will be 1:18 A. M. June 8 at Detroit, and in Chicago 55 minutes past midnight. The point of nearest approach will be 18° from the southernmost point of the Moon's limb towards the west.

II. An Annular Eclipse of the Sun, Tuesday, June 17, invisible in North America, but visible at the eastern extremity of South America and in the northern half of Africa, with the intermediate ocean, also in Europe and Asia.

III. A PARTIAL ECLIPSE OF THE MOON, Wednesday, November 26, invisible in the United States east of Dakota, but visible throughout the western half of North America, on the Pacific Ocean, and in Australia and Asia. This eclipse will begin 14° from the northernmost point of the Moon's limb toward the west, and only .005 of the diameter will be shadowed.

IV. A CENTRAL ECLIPSE OF THE SUN, Friday, December 12, invisible on the American Continent, and visible only in Australia, upon the Indian Ocean, and around the South Pole.

First Month.

#### **JANUARY, 1890.**

31 Days.

4		For Michigan			PHASES OF THE MOON. D. H. M.
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon rises.	Full Moon.     6     0     5 mor.       Last Quarter.     14     1     1       New Moon.     20     6     17 eve.       First Quarter     27     2     44
4567890112345678901223456678990112345678990	We The Fras S Mo Tue The Fras	7 300 307 7 300 7 7 300 7 7 300 7 7 300 7 7 300 7 7 300 7 7 299 7 7 297 7 7 297 7 7 297 7 7 297 7 7 297 7 7 297 7 7 297 7 7 297 7 7 187 7 7 197 19	4 39 39 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 12 5 13 5 16 11 7 6 6 11 7 7 6 8 4 7 7 22 8 9 3 5 10 7 7 11 10 0 15 5 5 6 6 12 8 47 7 8 30 9 11 10 5 7 14 10 5 11 15 7 14 12 3 4 7 8 3 3 6 6 12 8 5 5 6 6 12 8 3 8 6 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 3 8 6 8 8 8 8	Hull court-martial in Albany, 1814. Emancipation proclam'n 1863 Albion College burned, 1854. Gov. Mason died, New York. 1843 First township in Wayne Co. formed, 1818. Richmond burned, 1781 450 guns at Detroit Jall seized by Canadian patriots

#### Second Month.

#### FEBRUARY, 1890.

28 Days.

	٠	For	Micl	rigan	PHASES OF THE MOON, D. H. M.
岁	Day of Week.	zć.	Sun Sets.	<b>1</b>	Full Moon
2€	2€	_ 8	ية _	Moon sets.	Last Quarter
9-	3	#E	300	ا " قا	New Moon
4	_	802	02	-	First Quarter 5 02
		н м	нж	нм	
1	Sa S Mo	7 14	5 16	н м 5 1	
2	S	7 18	5 16	5 51	
8	Mo		5 17		
4	Tu	7 11	9 18	rises 5 55	Election to 1st Mich. Const. Conv., 1835. State \$150 bounty act. 1865. Detroit first designated a city by law, 1807. Hatcher's Run, 1865.
2	Th.	7 10	K 91	8 58	Treaty of alliance of U. S. and France, 1778. W. J. Baxter d.,.1888
7	Fr.	7 7	5 22	8 1	Gen. Sherman in Det. 1866 Philo Parsons b., '17; Thos. Berry 1829
123456789	Sa	7 6	5 23	6 58 8 1 9 4	M'y Q'n of Scots beheaded, 1586 Gen. Sher. b., '20; Gov. Blair 1818
ğ	We Th Fr Sa Mo Tu	7 5	5 25	10 8	Det. celebrates admis'n of State, 1837. Gen. W. H. Harrison b. 1778
}0 11	Mo	7 4	5 26	11 18	Can. secured to Eng. by treaty of Paris, 1768. R. S. Willis b1819
11	Tu	7 2	5 27	mor	Spanish republic proclaimed, 73. William and Mary crowned 1689
	We Th	7 1 6 59	5 29	0 21 1 31	A. Lincoln b., '09; G. W. Bissell, '23. Kant d. '04; H. Seymour. 1886 Capt. Cook killed, 1779. Com. Isaac Hull d., '43; Cotton Mather. 1728
14	Fr	R 59	K 21	9 42	ST VALENTINE'S DAY Oregon admitted 1859
	Sa	6 58 6 57	5 82	3 52	St. Valentine's Day Oregon admitted
16	S	16 56	15 84	4 57	Act for election of Mich. delegate to Cong., '19. L. Beecher b 1815
17	Mo	6 54	5 85	5 55	Charleston and Columbia occupied by Feds., '65. J. B. Gough d. 1886
18		6 53		6 42	
	We	6 51 6 50	5 87	sets	ASH WEDNESDAY. 1st nat'l Thanksgiving, 1795. Florida ceded, 1821 Battle of Olustee, '64. Leo XIII. Pope, '78. H. B. Ledyard b 1844
20	Th	6 48		8 29	First ordinance to establish hydraulic company in Detroit1825
22	Sa	6 47	K 41	9 89	WASHINGTON'S B'DAY, 1782. H. P. Baldwin b., '14; M. J. Murphy. 1851
23	S	6 46	5 48	10 47	Geological survey of State auth'd, '87. Battle of Buena Vista 1847
24	Fr Sa Mo	6 44	5 44	11 58	Clark recaptures Vincennes, 1779. Det. city charter revoked1809
25	Tu	6 45		mor	Canadians can'ade Pat's on Fight'g Isl., '38. J. V. Campbell b 1828
20	∣we	D 41	15 46	0 57	Gen. Scott in Det. '88. Gen. Sickles acq'd'59. R.R. Livingston d. 1818
27	Th	6 86	15 47 15 49	1 58	First Protestant church dedicated in Det. '20. R. A. Alger b 1886 Det. Metro. Police estab. '65. Gov. Felch b., '06; S. T. Douglass 1814
-	FT	10 00	45 CH	N & 00	Dev. Mento. I once estato. oc. Gov. Peten o., to, S. I. Douglass1014

# Third Month.

# MARCH, 1890.

31 Days.

-1		For 1	Mich	iigan	PHASES OF THE MOON. D. H. M.
Day of Month.	Day of Week.	Sun rises.	sun sets.	Moon sets.	Full Moon.     6     1     15 eve.       Last Quarter.     13     10     33     "       New Moon.     20     3     29     "       First Quarter     28     4     0 morn.
23456789012345678901234567890	SMO TWE THE SS SMOTH WE THE SS SMOTH WE THE SS SMOTH WE THE SS SMOTH WE THE SS SMOTH SMOTH SS SMOTH SMOTH SMOTH SS SMOTH SM	6 6 33 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 50 5 51 5 52 5 55 5 56 5 57 5 58 5 59 5 59	3 48 4 34 5 15 5 5 50 6 20 6 56 8 9 0 10 13 11 23 7 0 33 1 42 2 3 4 3 4 3 4 4 3 4 5 5 5 50 7 16 5 5 50 8 25 9 3 4 10 11 12 7 13 8 25 9 9 3 1 11 12 1 12 12 1 1	Hull Gov. of Michigan, 1805. Horace Greeley in Detroit 184 Detroit a port of entry, 1799. Gen. Lander died at Paw Paw., 188 Mich. Ter. gov't reorganized. 1823. First Detroit election 189 Mich. Ter. gov't reorganized. 1823. First Detroit election 188 Mich. Ter. gov't reorganized. Edw. Breitung d., Eastman, Ga 188 Boston Massacre, 1770. Dred Scott decision 185 Detroit riot against negroes, 1863. Louisa Alcott died 188 Florida adm., 1844. Bible Society founded, '04. O. M. Poe b., 188 Cadillac I'ves Quebec for Det., 1701. Massacre of Moravians., 178 State capital loc. at Lansing, 1846. Battle Hampton Roads 188 Boone an Indian captive at Detroit, 1778. Benj. West died 189 Bilizzard in E. States., 1888. Grant Lieut. Gen., '64. H. Bergh d. 188 Czar assassinated, 1880. Johnson impeachment trial begins., 186 Czar assassinated, 1880. Johnson impeachment trial begins., 186 Michigan wildcat banking law, 1837. Maine admitted 188 Gapital removed to Lansing, 1847. Battle of Guilford C. H 178 St. Patrick's Day. Solomon Davis b., 1792; H. A. Newland., 183 Law for Mich. Univ., 1837. End of last legislature in Detroit, 184 "Uncle Tom's Cabin" published, 1832. John Owen born 185 St.,000,000 Mich. int. improvement loan, 1837. W. B. Wesson b., 188 Ter. S. S. Union & Det. Tract Soc. org. 1831. H. C. Wyman b., 188 Battle of Winchester, 1862. Chief Justice Waite died 188 Byain ack. independence of U. S., 1783. Longfellow died 188 Hudson river discovered, 1609. Port bill passed 184 Hudson river discovered, 1609. Port bill passed 184 Hudson river discovered, 1609. Port bill passed 185 Hudson river discovered, 1609. Port bill passed 186 Hudson river discovered 1609. Port bill passed 186 Hudson river discovered, 1609. Port bill passed 187 Hudson river discovered, 1609. Port bill passed 186 Hudson river discovered, 1609. Port bill passed 186 Hudson river discovered, 1609. Port bill passed 186 Hudson river discovered to the French, 1

# Fourth Month.

# APRIL, 1890.

		For	Micl	higan	PHASES OF THE MOON. D. H.	v
Day of Month.	Day of Week.	Sun rises.	Sun Sets.	Moon sets,	Full Moon     5     3       Last Quarter     12     5       New Moon     19     2       First Quarter     26     11	52 mor. 21
1233456789011234567890122344566789	The Francisco Tue	H M 5 43 43 43 45 43 45 45 45 45 45 45 45 45 45 45 45 45 45	H M 6 26 6 26 26 6 28 6 6 30 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 32 6 6 41 6 6 42 6 6 46 6 50 6 50 6 50 6 50 6 50 6 50 6	H M 4 222 45 16 5 41 17 18 8 2 9 12 11 36 11 36 11 37 11 36 11 37	Richmond captured, 1865. Gen. Macomb b. in De Good Friday. Elec, to first Mich. const. convent Yorktown besieged, 1862. St. Louis election riot., EASTER. Washington elec. Pres., 1789. Bat. of Sh Marietta settled, 1788. Federal victory at Shiloh. French invade Spain, 1823. Bat. of Mansfield, 1864. Det. Soldiers' Mon. ded., 1872. Flower show, '89. I. Shinplasters ordained in Mich., 1827. J. M. Stauley Det. Fire Commission organized, 1867. Hamtram Det. Board of Councilmen, 1881. Fort Sumter bot Mich. Circuit courts created, 1827. Fort Sumter so President Lincoln assassinated	rge Baxter. 18 troit 17 ton 18 libh open'd. 18 A. Patti b. 18 ee's surr. 18 rd died 18 sk d 18 sk d 18 sk d 18 uit courts. 18 iii courts. 18 iii 18 ii

MAY, 1890.

31 Days.

d		For	Micl	higan	PHASES OF THE MOON. D. H. M.
Day of Month.	Day of Week	Sun rises.	Sun sets.	Moon sets.	Full Moon       4       8       37 eve.         Last Quarter       11       10       49 morn.         New Moon       18       2       46 eve.         First Quarter       26       5       2
1 2 3 4 4 5 6 7 7 8 9 1 1 1 2 1 3 4 1 1 5 1 1 5 1 1 5 1 9 2 2 3 2 2 3 2 2 5 2 6 7 2 8 8 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	Threson out of the second of t	■ 55 54 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	H M 6 59 7 7 7 1 1 2 7 7 7 7 8 8 7 7 7 7 7 8 8 7 7 7 7 8 9 9 7 7 7 1 1 1 2 7 7 1 1 2 2 7 7 1 2 2 7 7 2 2 3 7 7 2 2 7 7 7 2 7 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 2 7 7 7 2 7	8 43 43 4 4 32 rises 8 100 34 11 88 0 0 83 1 17 153 3 43 4 9 19 10 16 11 5 11 10 10 10 10 10 10 10 10 10 10 10 10	Proctor attacks Fort Meigs, 1818. Gen. Heintzelman died 1880 Hudson Bay Co. incorp., 1670. Battle of Chancellorsville 1863 First municipal election in Detroit, 1802. Jamaica discov'd 1494 Anarchist massacre in Chicago, 1836. Yorktown evacuated 1862 Centennial tree-planting in Mich., 1876. Free Press started 1831 Third Const. Conv., '67. J. S. Farrand b., 1815; Jas. Birney d. 1883 Pontiac's attempt on Detroit, 1763. Indiana Terr. erected 1890 Battle of Palo Alto, 1846. Treaty of Washington 1871 Murders under Pontiac at Detroit, 1763. C. H. Buhl born
80 81	Fr	4 27 4 27 4 26	7 28	2 83	Corner-st. Det. Pub. Lib. laid, '78. Det. & St. Jos. R. R. incorp. 1832 DECORATION DAY. Congress met in Wash., 1808. Pope d

Sixth Month.

# JUNE, 1890.

Day of Month. Sun Yeek. Sun Xneek. Sun Xneek. Moon Seta	PHASES OF THE MOON. D. H. M. Full Moon. 8 1 2 mor. Last Quarter. 9 4 18 eve. New Moon. 17 4 26 mor. First Quarter. 25 8 21 44
H MH M H M H M H M H M H M H M H M H M	British surr. military posts, 1796. Bishop Flaget in Detroit 1818 Bank of Michigan organized, 1818. Battle of Cold Harbor 1864 Second Const. Conv., 1850. Intern. Typo. Union in Detroit 1878 Massacre old Fort Mackinac, 1763. Battle of Magenta 1869 Cadillac leaves Lachine for Detroit, 1701. New city charter 1883 Charlevoix at Det., 1721. Second Mich. Infantry leave Det 1861 First Legis. Coun. met Det., 1824. Mich. regiments return 1865 Jamestown abandoned, 1610. Wolfe attacks Louisburg 1758 Corner-stone Ste. Anne's church laid, 1818. J. H. Carstens b. 1848 De Soto lands, 1539. Dutch at N. Y., 1867. War with Tripoli. 1801 Detroit burned, 1805. Detroit Daily Advertiser started 1836 Special session Mich. Legis. to consider wildcat banking 1837 Miss Martineau in Det., 1836. Nat. Conv. Commercial Trav 1844 Cass exp. reaches Soo, 1820. Army Potomac Reunion Det 1832 Cadillac acquitted, 1705. Det. Branch Chris. Commission org. 1863 Str. Geo. Wash'ton burned nr. Buff., '38. Gen. Grant in Det. 1866 War with Great Britain dec., '12. Lyman Beecher in Detroit 1888 Privateer Alabama fought and sunk by Kearsarge 1864 U. S. flag adopted, 1777. Opening Det. Branch Mich. Univ 1838 Day of prayer ag. cholera in Det., '49. Greely party found 1884 Battle Springfield, N. J., 1780; Solferino, 1850. Leibnitz born 1646
26 Th 4 247 40 0 34 27 Fr 4 357 40 0 58 28 8a 4 257 40 1 24 29 8 4 257 40 1 54 30 Mo 4 257 40 2 30	Mich. Territory includes part of Dakota and intermediate1834

#### Seventh Month.

# JULY, 1890.

# 31 Days.

-		For	Mic	higan	
Month	Day of Week.	Sun rises.	Sun sets.	Moon sets.	Full Moon     2     8     51     morn.       Last Quarter     8     11     11     eve.       New Moon     16     7     17     "       First Quarter     24     9     12     "       Full Moon     31     3     52     "
2345678901234567890	We The Francisco Mount of the Francisco Mount	4 264 4 274 4 4 284 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7 400 7 7 400 7 7 400 7 7 400 7 7 899 7 7 395 7 7 35 7 7 35 7 7 36 7 7 35 7 7 27 27 27 27 27 27 27 27 27 27 27 27	9 51 10 29 11 11 128 11 53 mor 0 19 0 45 1 146 2 24 3 8 52 8 22 8 57 9 9 26 9 52 10 15 11 0 37 11 25 11 10 24 1 1 4 1 1 4 1 1 4 1 1 5 1 1 1 5 1 1 1 5 1 1 1 5 1 5	Battle of Lundy's Lane, 1814. Judge Clifford died

# Eighth Month.

For Michigan

# **AUGUST, 1890.**

j	Day of Week.	2 Or Michigan			PHASES OF THE MOON, D. H. M.
Day of Month.		Sun rises.	Sun sets.	Moon rises.	Last Quarter     7     8     47 mor.       New Moon     15     10     47     "       First Quarter     23     7     48     "       Full Moon     29     11     3 eve.
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	S Moo Tu We Th Fr Sa S S Moo Tu We Th Fr Sa	4 4 5 5 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7 147 7 127 7 117 7 10 8 7 7 7 6 6 5 8 6 5 5 7 7 7 0 6 5 8 6 6 5 5 6 6 5 5 6 6 6 5 8 6 6 6 4 8 6 6 6 8 8 6 6 8 8 6 6 8 8 6 6 8 8 6 6 8 8 8 6 8	8 23 8 58 9 28 9 28 10 22 10 48 11 16 11 48 10 24 1 5 1 53 2 47 3 47 3 48 7 56 8 20 8 43 9 28	Str. Walk-in-the-Water at Detroit, 1818. First draft in Det 1855 Fr. Mesnard Ivs. Quebec for West, 1660. British slavery abol. 1855 2d bat. Bull Run, 1862. O. W. Holmes b., 1899; D. B. Duffield, 1801

# Ninth Month.

# SEPTEMBER, 1890.

30 Days.

		For Mich		PHASES OF THE MOON. D. H. M.
Day of	Day of Week.	Sun Fises. Sun sets.	Moon rises.	Last Quarter       5       9       57 eve.         New Moon       14       2 21 mor.         First Quarter       21       4       33 eve.         Full Moon       28       7       28 mor.
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	We Thr Fra S Mo Twe Thr Fra S Mo	5 276 8 31 5 286 288 6 28 6 28 6 28 6 28 6 28 6 28	8 19 9 46 101 29 111 49 9 46 101 29 111 49 9 46 101 22 37 7 32 4 339 8 7 10 25 7 8 25 8 58 8 58 8 58 8 58 8 58 8 58	President Johnson in Detroit, 1866. French Republic

# Tenth Month.

For Michigan

# **OCTOBER, 1890.**

d		For		ugan	PHASES OF THE MOON. D. H. M.				
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon rises.	Last Quarter     5     2     51 eve.       New Moon     13     5     33     "       First Quarter     21     0     4 mor.       Full Moon     27     6     10 eve.				
23456789011234567891100000000000000000000000000000000000	The Franch of Tue Web The Franch of Tue The Fran	5 57 58 56 6 6 12 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	9 41 10 32 11 27 mor 0 25 1 26 2 28 3 30 4 33 5 36 sets 6 27 7 35 8 21 9 17 10 21 11 33 mor 0 48 2 48 3 19	André hanged, 1780. A. B. C. F. M., Det., '83. Gov. Bingham b 1811 Battle of Cornith, '62. Geo. Bancroft b., 1800. Black Hawk d. 1883 Det. Med. & Lib. Ass'n org., '76. S. M. Cutcheon b				

# Eleventh Month.

# NOVEMBER, 1890.

30 Days.

	ن	For Mich		PHASES OF THE MOON. D. H. M.
Day of Month.	Day of Week.	Sun rises. Sun sets.	- 86	Last Quarter       4 10 41 mor.         New Moon       12 8 5 "
ÞĚ	<b>≥</b>	3 E E 8	8.5	First Quarter
Ā	<u>a</u>	<u>v</u> a <u>v</u> a	Σ	Full Moon26 7 51 "
		нинм		Ticker and wales 1997 77 Olean Hamilton at all 1999
2 8 4		6 33 4 54 6 34 4 52		Lisbon earthquake, 1755. Z. Chandler died
ã	Mo	6 36 4 51		Wayne Co. Bible Soc. org., 1830. Gen. I. B. Richardson died 1862
4		6 37 4 50		Declaration of rights by Congress, 1774. St. Clair's defeat1791
ğ	We	6 38 4 49 6 40 4 48	mor	Moravian ch. cons. on Clinton, 1782. 2d constitution adopted.1850 Detroit Soldiers' Aid Society formed, 1861. Lincoln elected1860
2	Fr	6 41 4 46	1 17	Battle of Tippecanoe, 1811. Detroit Young Men's Hall ded1850
ś	Sa	6 42 4 45	2 19	First Presidential election in Mich., 1886. Lincoln re-elected 1864
. 9	S	6 40 4 48 6 41 4 46 6 42 4 45 6 43 4 44 6 45 4 43	3 21	Mayflower arrived, 1620. Milton died, 1674. Boston fire1872
10	Mo Tu	6 46 4 42	5 31	Stanley met Livingstone, '72. Wirzexec., '65. C. A. Newcomb b.1887 Battle of Chrysler's Farm, 1813. Chicago Anarchists hanged., 1887
12				Grand Trunk R. R. opened, 1856. M. S. Smith born1834
13	Тb		5 33	Am. Public Health Association in Detroit, 1888 Star showers, 1888
	Fr Sa	6 50 4 89 6 51 4 39	6 16	Guiteau trial began, 1881. Hegel died
16		6 52 4 38		Great fire in New York, 1835. Federal government adopted1777 Sherman's march to sea begins, 1864. Riel executed1885
17	Mo	6 53 4 37	9 22	Gov. Baldwin appointed Senator, 1877. Gov. Jerome born1829
18		6 55 4 36		Pres. Arthurd., 86; G. Law, 81; Prof. Forbes, 54; Card. Wolsey. 1580
20	We Th	6 56 4 35 6 57 4 34	11 51	Jay's treaty, 1794. Det. Trib. started, '48. Herman Keifer b1825 Moody revival in Det., '84. Berlin decree, 1806. H. Wilson d1875
21	Fr	6 58 4 34	1 5	Wayne Co. re-organized by Gov. Cass, 1815. Ft. Niagara bomb, 1812
22	Sa	6 59 4 33	2 18	First train to Grand Haven, 1858. Thurlow Weed died 1882
23		7 14 32 7 24 32	3 30 4 42	France a republic, 1792. Dr. Parkman killed
	Tu	7 84 31	5 52	First Thanksgiving day in Detroit, 1824. New York evacuated,1788
26	We	7 44 31	rises	Battle Mission Ridge, 1863. Detroit City Bank opened
		7 54 80		THANKSGIVING DAY. Hoosac Tunnel opened, 1873. F. Buhl b.1806
28 29		7 64 30 7 74 29	7 3	Ohio a State, 1802. Washington Irving died
80	S	7 84 29	8 0	Union victory at Franklin, 1864. Prelim. peace with England. 1782

## Twelfth Month.

# DECEMBER, 1890.

d	Day of Week.	For	Mici	higan	PHASES OF THE MOON. D. H. M.
Day of Month.		Sun rises.	Sun sets.	Moon rises.	Last Quarter     4     7     54 mor.       New Moon     11     9     9e eve.       First Quarter     18     3     4 mor.       Full Moon     26     0     25 eve.
10 11 12 13 14 15 16 17 18 19 20 22 22 22 22 22 22 22 22 22 22 22 22	Tue Thr Fra SS Mouth We Thr Sa S Mouth We Thr Sa	7 97 107 7 117 117 1	4 284 4 284 4 284 4 284 4 285 4 4 286 4 4 4 286 4 4 286 4 4 4 286 4 4 4 286 4 4 4 286 4 4 4 286 4 4 4 286 4 4 4 286 4 4 4 4 286 4 4 4 4 286 4 4 4 4 4 286 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10 1 1 11 2 10 0 3 3 1 5 5 6 6 10 10 10 11 10 10 10 10 10 10 10 10 10	Landing of Pilgrims, 1620. Embargo, 1807. E. E. Myers born, 183 Wash'ton resigns, 1782. Det. Courier starts, 32. Heavy winds, 187 Treaty of Ghent, 1814. Ft. Fisher stormed, 1864. L. Bacon d. 188 Christmas. Gr. Dk. Alexis in Det., 1871. S. D. Elwood h

# **Bractical** Information.

Notes on the Calendar.

A year is commonly said to be 3651/4 days | long, but in fact is 11 minutes shorter. This is offset by the exclusion of the last year in each century from among leap-years, so that 1900 will not be a leap year. But an extra day is thus lost in 400 years, so that every cen-turial year divisible by 400 retains its rights, and 2000 will be a leap-year. These gains and losses so nearly balance that it takes 3866 years to make the difference of another day, and no provision has yet been thought necessary for this.

Our year was fixed by Julius Cæsar 46 B. c., with the added day in February for leap year (Julian Calendar); but the other arrangements are due in part to Pope Gregory XIII, who formed the Gregorian Calendar in 1582, who formed the Gregorian Calendar in 1582, dropping ten days from that year, to make good the increase since Cæsar's time. The New Style was not legally adopted in England and this country until 1752, when it was necessary to drop 11 days, and the day after Sept. 2 in that year was Sept. 14.

The Christian Era was introduced by the monk Dionysius 527 A. D., but he began four or five years too late, as is now known; so that our year 1890 is truly 1884 or 1893. About

that our year 1890 is truly 1894 or 1895. About 180 calculations of time from Adam to Christ have been made by Jewish and Christian 180 calculations of time from Adam to Christ have been made by Jewish and Christian authors, the date of creation in them varying from 6984 to 3102 B. c. Under Archbishop Ussher's chronology (that of the English Bible), seven ages of the world are reckoned—1, from creation to the deluge, 4004–2249; 2, to Abraham in Canaan, 2348–1922; 3, to the exclus, 1921–1491; 4. to Solomon's Temple, 1490–1914; 5, to the fall of Jerusalem, 1014–588; 6, to the birth of Christ, 588–4 (or 5) B. c.; 7, the Christian Era. About 30 other eras are recorded, of which the best known are the Christian Era. About 30 other eras are recorded, of which the best known are the Christian Era. About 30 other eras are recorded, of which the best known are the chief to 378 B. c.; and the Mohammedan, from the hegira or flight of Mohammed (A. H.), July 16, 622 A. D. Others are noted in our Astronomical Calendar.

The original Month was probably the lunar one, which the Jews, Athenians and early Romans used, of alternately 29 and 30 days, with a short 13th month to complete the solar year. Cessar fixed the months as now, but he sees for their recultures of the solar year.

year. Cæsar fixed the months as now, but his reason for their peculiar assignments of days is unknown. They all bear Latin names, but as the Roman year began with March, their seventh month, indicated by the name September, is our ninth, and similarly to December, inclusive. In many parts of the old world until quite recent times the year began with Lady Day, March 25; and this accounts for such dates as that of King Charles I.'s execution, when given as Jan. 30, 1648-9, it being 1648 in England, which retained the Old System, and 1649 in Scotland, which began the rest Lan! Christone has beaunt the care in system and 198 in Scotland, which construct year Jan. 1. Christmas has begun the year in some lands; Easter in others.

The week is the puzzle of the calendar, since

no one knows why it consists of just seven days, unless from the Mosaic record of creation; and the seven-day week was known long before that in Egypt, and is common through-out the East. The French infidels of the Revolution by their calendar of 1793 made a week outdon by them calendar of 1735 made a week or decade of ten days, and a month of thirty, adding 5 to September to fill the year. They also designated the months, beginning Sept. 22, 1792, in order as the Vintage, Foggy, Sleety, Snowy, Rainy, Windy, Budding, Flowery, Pasture, Harvest, Hot, and Fruit Months.

Our day-names are all of German or Norse origin, and embalm an old superstition that some celestial body, as the sun, moon, each of five planets, presides over the first hour of the day. The church day, like that of creation, was from sunset to sunset, and this still rules in the practice of some Sabbath keepers.

THE UNLUCKY DAYS.

The following is a curiosity of literature and an interesting remnant of old supersti-tions, from the venerable "Sarum Missal":

January. Of this first month, the opening day And seventh like a sword will slay. February.

The fourth day bringeth down to death, The third will stop a strong man's breath. March.

The first the greedy glutton slays, The fourth cuts short the drunkard's days.

April.

The tenth, and the eleventh too,
Are ready death's fell work to do. May.

The third to slay poor man hath power, The seventh destroyeth in an hour. June.

The tenth a pallid visage shows No faith nor truth the fifteenth knows.

July.
The thirteenth is a fatal day,
The tenth alike will mortals slay. August.

The first kills strong ones at a blow, The second lays a cohort low. September

The third day of the month September. And tenth, bring evil to each member. October.

The third and tenth, with poisoned breath, To man are foes as foul as death. November.

The fifth bears scorpion-sting of deadly pain, The third is tinctured with destruction's train. December.

The seventh's a fatal day to human life, The tenth is with a serpent's venom rife.

SUN-TIME and clock-time precisely agree on but four days of the year, April 15, June 15, Sept. 1, and Dec. 24. Sun-time is slowest about Feb. 12,—14½ minutes; and fastest Nov. 2, by 16½ minutes. All astronomical almanacs give the difference for every day; but any one may calculate the discrepancy between the clock and the sun-dial or noonwark by taking from any good element the mark by taking from any good almanac the difference of time between sunrise and noon and that between noon and sunset. Half this difference is the number of minutes by which the dial or noon-mark is slow or fast, according to the season. This is called "the equation of time." This disagreement beequation of the earth's axis to the plane of the ecliptic and its unequal movement in its orbit, causing slight irregularity of the solar day.

Stop coughing or sneezing by pressing on the nerves of the lips in the neighborhood of the nose. A sneeze may often be stopped by pinching the middle of the nose. Press, ing in the neighborhood of the ear, or press-ing very hard on the top of the mouth inside, is also a means of stopping coughing. The will has also immense power.

#### The International Date Line.

This is the line at which dates must be made later by one day when crossing from east to west, and earlier by one day crossing from west to east. To be exact, it should lie throughout upon the meridian of 180° west (or east) of Greenwich; but in the practice of sailors it first passes just west of Behring Straits, then west of Clark's or St. Lawrence Island, west of Gore's Island, and southwesterly, between the Aleutian Islands and Asia. Some authorities place it east of Behring Island. It then passes southwesterly some degrees east of Cape Lopatka and the group of Kurile Islands; thence just east of the Japan Islands, Jesso, and Niphon, keeping west of Guadalupa and Margarete's Islands, but east of Bonin, Loo Choo, and Patchoo Islands, and southeast of Formosa. The line then passes through Bashee Channel, just north of the Bashee Islands. It enters the China Sea east of Hong Kong, then passes south, just west of the

Philippine Islands, but keeps east of Palawan Islands. Here it reaches its most western point, in about 116° east longitude. It then takes a southwesterly course, passing through the Sooloo Islands, south of Mindanso and north of Gililo. Thence it passes east, nearly parallel to the equator and just north of it, to a point about 165° west longitude, just north of Schauck Island; thence southeasterly, leaving High Island, Gilbert Archipelago, Tawell Islands, and the De Peyster group on the northeast; thence past the Navigator or Samoan Islands to longitude about 168° west, thence it turns south, keeping east of the Friendly, Tonga, Vesquez, Kermadee, and Curtis Islands, and west of the Society Islands and Cook's or Harvey's Islands; thence it continues south, bearing a little to the west, so as to cross, according to some authorities, Chatham Islands; thence to the South Pole.

Standard and Local Times, Etc.

About twelve years ago a practicable plan occurred to Prof. Abbe, of the Signal Service Bureau in Washington (formerly of Michigan University), to reduce the standard times used by American railways from fifty-three, as then, to five, to the inestimable convenience of the railroads and the traveling public. His scheme was elaborated by the learned Dr. Barnard, Chancellor of Columbia College, was Barnard, Chancellor of Columbia College, was publicly proposed in 1878, and after approval by a number of scientific societies in this and foreign countries, was adopted at a general Railway Time Convention held in Chicago October 11, 1883, to take effect at noon of the next November 18. By this system the North American continent is divided into five longitudinal belts, each with its own meridian of standard time a degree of longitude 150 from standard time, a degree of longitude 150 from the next standard meridian on either side. The basis of the plan is thus the difference of one hour's time for every fitteen degrees of longitude, since the sun (apparently) compasses the globe (860°) in 24 hours. A series of standard meridians was adopted, - 60°, 75°, 90°, 105°, and 120° west from Greenwich, each of which was made the centre of a belt of 15° width, the boundary lines of which, as 6° 80′, 82° 80′, etc., should approximately limit the use of standard times. The solar times on these meridians give the The solar times on these meridians give the standard times, which are of course half an hour fast on the western limit and as much slow on the eastern. The standard meridian for Atlantic or Intercolonial time (60°) passes between Newfoundland and Nova Scotia; that for Eastern time, near Ogdensburg, N. Y.; Central, through New Orleans and St. Louis: Mountain, near Denver, Colorado; and Pacific, about 2° 30′ east of San Francisco. Eastern standard time reaches from the further boundary of Maine to the Detroit and St. Clair rivers, although none of these are exactly on the bounding meridians. Passengers crossing eastward set their watches an hour ahead; westward, an hour watches an hour ahead; westward, an hour behind. All Michigan railroads run by Central standard time, which prevails from Detroit, Port Huron, and Sault Ste. Maria to Mandan, Dak., North Platte, Neb., Dodge City, Kan., and elsewhere on the transcontinental lane. Our State law requires the use of the control of t ARU., and eisewhere on the transcontinental lines. Our State law requires its use in elections, courts, banks, and public offices. Railroad or standard time is also adopted for general use in many places, but not in Detroit and other cities of size.

Local time in Detroit is 37 minutes slower into this pour a little than in New York; Lausing and Jackson, 43; unless it is very thick Grand Rapids and Kalamazoo, 47; Marquette, immediately drop out.

ocal 1 Imes, Etc.

54; Houghton, 59; Chicago, 56; St. Louis, 1
hour and 6 minutes; Kansas City, 1:24; Omaha,
1:29; Denver, 2:05; Salt Lake City, 2:22; San
Francisco and Portland, Ore, 3:15; City of
Mexico, 1:40; Honolu, 5:36; Yokohama, 10:45;
Hong Kong, 11:27. Local time in Boston is 12
minutes faster than in New York; Portland,
Me., 15; Bangor, 21; St. John, N. B., 32; Halifax, 51; Dublin, 4:31; London, 4:56; Paris, 5:02;
Berlin, 5:50; St. Petersburg, 6:57; Calcutta,
10:50.

During the last year a gentleman in Ionia, Mich., is said to have devised an ingenious time-keeper in the shape of a hemisphere revolving once in 24 hours, and indicating at any moment the time at any given point on the surfacee of the globe.

How to make a noon-mark, or meridian line: On a clear night set two perpendicular stakes, eight or ten feet high, a few feet apart in direct line with the north star, and when the sun casts the shadow of the southern one straight toward the other, make your mark by it, for it is then precisely noon by summe. It is better to do this on April 15, June 15, Sept. 1, or December 24, as these are the only days of the year on which sun-time agrees exactly with clock-time.

To remove furniture bruises, wet the part with warm water; double a piece of brown paper five or six times, soak, and lay it on the place; apply on that a hot flat-iron till the moisture is evaporated. If the bruise be not gone, repeat the process, and after two or three applications the dent or bruise will be raised level with the surface. Keep it continually wet, and in a few minutes the bruise will disappear.

A HUGE electro-magnet, suspended from a crane, is used at the steel works in Cleveland, O., to pick up iron or steel bars and billets. It will lift 800 pounds, and as son as the electric current is turned off after moving the load, will drop it in the proper place, thus doing the work of a gang of men.

To perforate glass, stick a piece of stiff clay or putty where you wish to make the hole; make a hole in the putty of the size you want, reaching the glass, of course, and into this pour a little molten lead, when unless it is very thick glass, the piece will immediately drop out.

## Herschell's Table for Weather Prophecy.

If Nev Moor	v Moon, Fir , or Last Q	st Que Larter	rter, Full happens	IN SUMMER.	IN WINTER.
Betwe	en midnigh	t and	o'clock	Fair	Frost, unless wind southwest
"	2 and 4 n	ornin	<b>2</b>	Cold and showers	Snow and stormy.
66	4 and 6	66	<b></b>	Rain	Rain.
16	6and 8	66		Wind and rain	Stormy.
44	8 and 10	66		Changeable	Cold rain if wind w. snow if
64	10 and 12	66		Frequent showers	Cold rain if wind w, snow if e
44	12 and 2 a	afterno	on	Very rainy	Snow or rain.
46	2 and 4	66		Changeable	Fair and mild.
46	4 and 6	"		Fair	Fair.
**	6 and 8	66		Fair if wind northwest	Fair and frosty if wind n or n
44	8 and 10	44		Rainv if south or s. w	Rain or snow if s. or s. w.
44		dnight		Fair	Fair and frosty.

OBSERVATIONS.—1. The nearer the time of the moon's change, first quarter, full, and last quarter are to midnight, the fairer will be the weather during the next seven days. 2. The space for this calculation occupies from ten at night till two next morning. 3. The nearer to midday or noon the phases of the moon happen, the more foul or wet weather may be expected during the next seven days. 4. The space for this calculation occupies from ten in the forenoon to two in the afternoon. These observations refer principally to the summer, though they affect spring and autumn nearly in the same ratio. 5. The moon's change, first quarter, full, and last quarter, happening during six of the afternoon hours, i. e., from four to ten, may be followed by fair weather, but this is mostly dependent on the wind, as is noted in the table. 6. Though the weather, from a variety of irregular causes, is more uncertain in the latter part of autumn, the whole of winter, and the beginning of spring, yet in the main the above observations will apply to those periods also. 7. To prognosticate correctly, especially in those cases where the wind is concerned, the observer should be within sight of a good vane where the four cardinal points of the heavens are correctly placed. heavens are correctly placed.

# Wind and Weather Signals.

The new system of the United States Signal The new system of the United States Signal Service, going into operation March 1, 1887, is as follows: Flag No. 1, white square, indicates clear or fair weather; No. 2, blue square, rain or snow; No. 3, black triangle, temperature flag; No. 4, white square, black in the center, cold wave, usually ordered up at least 24 hours in advance. When it is up, No. 3 is not shown. When neither appears textionary temperature is avvected. pears, stationary temperature is expected, or a variation not exceeding 5° from the same hour of the previous day. When No. or a variation not exceeding 5° from the same hour of the previous day. When No. 3 is placed below No. 1, the indications are fair weather, colder; below No. 2, colder, after rain or snow; above No. 2, warmer, with rain or snow; above both 1 and 2, warmer, fair weather, rain or snow following; No. 4, below No. 1, indicates fair weather, cold wave. Nos. 4, 2, 1, 3, shown together in this order, prophesy cold wave, followed by rain or snow, this by fair weather, colder; 3, 1, 2, warmer, fair, then rain or snow. If the flags are displayed

horizontally, a small streamer shows from

which end they are to be read.

The danger or storm signal is a red, square flag, with black centre. Yellow, with white center, is the cautionary signal, but promises winds that well-appointed and seaworthy vessels may encounter safely. The red pennant, a rather long triangle, indicates winds easterly, from northeast to south inclusive, with storm-centre approaching; the white pennant westerly winds, from north to southwest inclusive, and in general that the storm-centre has passed. The former above the cautionary or storm signal prophesies probable winds from the northeast quadrant; below, winds from the southeast. The latter similarly indicates probabilities of wind from the northwest and southwest. The night storm signals are a red light for easterly and a red and white-

light for westerly winds.

Many railway trains in Michigan carry on. the sides of baggage cars weather signals.

#### More Weather Wisdom.

The following are abridged from Admiral Fitzroy's Observations on Weather, published by the London Board of Trade:

A rosy sky at sunset, clear or cloudy, indicates fine weather; Indian-red tint foreshadows rain. Red sky in the morning, bad weather or much wind, perhaps rain; gray

weather or much wind, perhaps rain; gray sky, then fine weather high dawn, wind; low dawn, fair weather.

Soft-looking or delicate clouds promise fine weather, with light or moderate breezes; hard-edged, oily-looking clouds, wind. A dark, gloomy blue sky means wind; but a light, bright blue sky indicates fine weather. Generally, the softer clouds look the less wind (but perhaps more rain) may be expected; and the harder, more "greasy," rolled, tufted, or rugged, the stronger the coming wind will prove. Also a bright, yellow sky at sunset presages wind; a pale yellow, wet; and a greenish, sickly looking color, wind and rain. Small, ruby-looking clouds foretell rain; light scud-clouds, driving clouds foretell rain; light scud-clouds, driving

across heavy masses, show wind and rain; but if alone, may indicate wind only.

High upper clouds crossing the sun, moon or stars in a direction different from that of lower clouds, or the wind then felt below, portend a change of wind towards their direction. After fine, clear weather, the first signs in the sky of a coming change are usually light streaks, curls, wisps, or mottled patches of distant white clouds, which increase and are followed by an overcasting of murky vapor, that grows into cloudiness. or murky vapor, that grows into cloudiness. This appearance, more or less oily or watery, as wind or rain will prevail, is an infallible sign. Usually, the higher or more distant such clouds seem to be, the more gradual but general the coming change of weather will prove.

Misty clouds, forming or hanging on heights, show wind and rain coming, if they remain, increase, or descend; if they rise or

remain, increase, or descend; if they rise or disperse, the weather will improve or become-

Scientific observation is said to have verified the following venerable weather aphor-

When the sun goes pale to bed. Twill rain to-morrow, it is said. When round the moon there is a brugh [halo],

The weather will be cold and rough. Clear moon, Frost soon.

When the mist creeps up the hill, Fisher, out, and try your skill When the clouds are upon the hills, They come down by the mills.

They come down by the mills.
When the wind veers 'gainst the sun,
Trust it not, for back 'twill run.
Mackerel sky and mares' tails
Make lofty ships carry low sails.
If the wind is northeast 8 days without rain Eight days will pass before south wind again.

Wild geese, wild geese, going out to sea, Good weather it will be.

If kites fly high, fine weather is at hand. If rooks go far abroad, it will be fine. If larks fly high and sing long, expect fine

When owls whoop much at night, expect

fair weather.

Cranes soaring along and quietly in the air foreshow fair weather. When sea-birds fly out early and far to seaward, moderate winds and fair weather

may be expected.

Bats or flying mice, coming out of their holes quietly after sunset and sporting themselves in the open air, premonstrate fair and calm weather.

White mist in winter indicates frost. Chickweed expands its leaves boldly and fully when fine weather is to follow.

When fires burn faster than usual, and with a blue flame, frosty weather may be expected.

In winter, when the sound of the breakers is unusually distinct, frost is indicated.

If wind follow sun's course, expect fair

In winter, when the moon's horns are sharp and well defined, frost is expected.

#### SHERÍDAN'S RHYMING CALENDAR

January snowy, February flowy, March blowy, April showery, May flowery, June bowery,

July moppy, August croppy, September poppy, October breezy, November wheezy, December freezy.

Rates and Regulations of Postage.

FIRST CLASS.—On all letters and matter closed against inspection, two cents an ounce or fraction thereof, except postal-cards or letters for local delivery mailed where no carriers are employed, when the rate is one cent Type-writer or manifold process work is subject to letter rates. Letters to be delivered at once must have special-delivery stamp, costing ten cents. Anything attached to a postal-card, unless a printed address-slip on the address side, brings letter postage, and nothing scurrilous or indecent upon it is allowed. If a letter is prepaid one full rate, it goes, and the remainder, if any, is collected of the recovery recipient.

SECOND CLASS.—On newspapers and magszines, or papers and periodicals published regularly at least four times a year, one cent on four ounces if mailed by the public, and one cent a pound if mailed by the publishers. Advertising sheets or free publications of the publication o tions, and all without legitimate subscribers, are third class. To actual subscribers in the county of publication, postage is free, except to free-delivery offices.

THIRD CLASS.—On circulars, books, pamphlets, proof-sheets, corrected proofs, and manuscript copy accompanying either, business cards, hand-bills, engravings, music, chromos, and other matter wholly in print, not exceeding four pounds in weight, one cent each two ounces or fraction. A single volume of a book may exceed four pounds. volume or a book may exceed rour pounds. The sender may write his name on the wrapper, or mark a passage in a book or paper, or write on a fiy-leaf a simple inscription. Packages must be wrapped with open sides or ends, or otherwise made easy of in-Immoral or lottery matter is spection.

FOURTH CLASS.—Articles of merchandise not liable to destroy, injure, or deface the mail, or harm any one in postal service, not exceeding four pounds' weight, pay one cent per ounce or fraction. They must be ceur per ounce or traction. They must be wrapped to admit examination, and fully prepaid. Poisons, explosives, inflammable things, live animals or insects, and bad-smelling stuff, will not be sent. Other articles liable to injure person or property

may be sent if properly protected. Over four ounces of liquid or oil can not be mailed nor above four pounds of other merchan-dise. Name and address of sender and a list of articles enclosed, and request to return, may be written or printed on wrapper.

Any matter, except second class, may be registered for ten cents, besides postage; but the post-office is not liable in case of its loss. Domestic money orders, not exceeding \$5, cost 5 cents; \$5 to \$10, 8; exceeding \$10 to \$15, 10; exceeding \$15 to \$30, 15; exceeding \$30 to \$40, 20; exceeding \$40 to \$50, 25; exceeding \$50 to \$60, 30; exceeding \$60 to \$70, 35; exceeding \$70 to \$80, 40; exceeding \$80 to \$100 inclusive, 45. Postal notes under \$5, payable to bearer, 8 cents. International orders, payable in foreign countries, may be had for 10 to 50 cents, according to amount.

Postage to Canada same as in the States. Packages not letters must be so wrapped or inclosed as to be easily examined. Most foreign countries are in the Universal Postal Union, with uniform rates as follow:

First Class.—Five cents per half-ounce. Includes letters and sealed packets. Postal cards, two cents each.

THIRD CLASS (printed matter).—One cent for each two ounces. Includes newspapers, books, miscellaneous printed matter, com-mercial papers, and book manuscripts. Limit of weight, four pounds six ounces; of dimensions, two feet by one foot.

FOURTH CLASS.—One cent for each two ounces. Includes samples of merchandise and patterns. Limit of weight, 834 ounces, except to France, Great Britain, Belgium, Switzerland, and the Argentine Republic, 12 ounces; of dimensions—length 8 inches, breadth 4, depth 2; in latter case, length 12 inches, width 8, depth 4.

-All articles not mailable for EXCLUDED. domestic delivery, letters or packets con-taining gold or silver, jewelry or coin, or any article liable to customs duty.

SUGGESTIONS TO THE PUBLIC (Official Postal Guide).—Mail early, especially in large num-bers, as often with newspapers and circu-lars. Trouble is much less if letters mailed in large numbers are tied in bundles, with

addresses all in one direction.

Make address legible and complete, with name of the post-office, county, and State; name of street and number, also on letters addressed to cities having letter-carriers. While a letter will eventually reach its described to the county of t While a letter will eventually reach its destination, the omission is often a cause of hesitation and delay. On letters for foreign places, especially in Canada, where many post-offices have the same names as in the United States and in England, name of the country as well as post-office should be given in full. It is better to write even names of States in full.

Avoid, as much as possible, envelopes of thin paper, especially where more than one sheet of paper, or any other article than paper, is enclosed. Being often handled, and even in mail-bags subject to pressure, they not unfrequently split open, giving cause for complaint against officials entirely

innocent in the matter.

Neversend money or other article of value through the mail, except by a money-order or registered letter. Any person who sends money or jewelry in an unregistered letter not only runs a risk of losing his property, but exposes to temptation everyone through whose hands his letter passes, and may be the means of bringing some clerk or letter-

carrier to ruin.
See that each letter contains full name and address of the writer, with county and State, in order to secure its return, if he to whom it is directed cannot be found. Many more undelivered letters could be returned if names and addresses of senders were if names and addresses of senders were fully and plainly written or printed inside or on the envelopes. Persons who have large correspondence find it best to use special-request envelopes; but those who only mail an occasional letter can save trouble by writing a request to "return if not delivered," etc., on the envelope. Dropping matter into a street mailing box or into the recented at a roct-office al-

and does not stick in its passage; observe also particularly whether the postage-stamps are securely fastened.

Postage-stamps should be placed on the upper right-hand corner of the address side. Postmasters are not obliged to accept

currency so mutilated as to be uncurrent. or the genuineness of which cannot be clearly ascertained, nor more than twentyfive cents in copper or nickel coins, nor to affix stamps to letters, nor to make change except as a matter of courtesy. They must not give credit for postage.

Letters cannot be carried out of the mail

as a business, except in stamped envelopes; to continue the practice, or receive money for so doing, would subject the offender to a penalty of \$150. Newspapers, magazines, and periodicals may be carried out of the mail for sale or distribution to subscribers, but if they are put into a post-office for delivery the postage must be paid.

Postmasters must not give information concerning the mail matter of another, or disclose the name of a box holder.

Mail-matter deposited in any receptacle erected by the Post-office Department, such as street mailing-boxes for the reception of mail-matter to be collected by letter-carriers, or boxes in railroad depots for the reception or boxes in railroad depots for the reception of matter to be collected by employees of the railway mail service, cannot be reclaimed by any one under any circumstances. Persons depositing letters in the latter, intended for city delivery, do so at their own risk, and cannot reclaim them except through the Dead-letter Office.

Letters addressed to persons temporarily actions in a diverse to free delivery.

sojourning in a city where the free delivery system is in operation should be marked "Transient" or "General Delivery," if not addressed to a street and number or some

other designated place of delivery.
All matter concerning lotteries, gift concerts, or schemes devised to defraud the Dropping matter into a street mailing box or into the receptacle at a post-office, always see that the packet falls into the box transmission in the United States mails.

# Passport Regulations.

Citizens of this country going abroad should provide themselves with passports, which are still required on the Franco-Spanish frontier, and are likely to be useful at any time in other parts of the Old World. A single passport is sufficient for a family party consisting of parents, children, and servants; others must procure separate passports. They are obtained only from the Department of State at Washington, upon application enclosing \$5 and proof of citizenship in the United States. If the applicant procure his own passport, not employing an agent or attorney, he may address the Department, "Passport Division," stating whether it is for a native or naturalized citizen, and procure a blank form of application without cost. This provides for a description of the applicant's vides for a description of the applicant's vides for a description of the applicant's person, including particulars of age, stature, forehead, eyes, nose, mouth, chin, hair, complexion, and face. If his wife, minor children, and servants, or any of them, accompany him, only their names, ages, and relationship to him need be given. If he is native here, his affidavit must be enclosed, showing his age and place of birth, and if born abroad, but child of a father born in the United States, it must state the latter fact, and that the father had resided here and at the time of applicant's birth was still a citizen of this country. This

must be supported by the affidavit of another citizen knowing the facts, as must the affidavit that does not contain this recital. The affidavits should be attested by a notary public under his signature and official seal, or in his absence by a justice of the peace or other officer administering oaths, for general purposes. If he have no seal of office, the certificate of a court of record to his official character must be appended. If the applicant is a naturalization should be enclosed, which will be returned; and his affidavit must show that he is the identical person named in it. Passports are identical person named in it. Passports are not issued to aliens, even when they have declared their intention to become citizens. The wife or widow of a naturalized citizen should enclose her husband's certificate, and swear that she is the wife or widow of the person it describes. Similarly in the case of children claiming citizenship through their father's naturalization while they were still minors which that a still minor which that a still minors which that a still minors which that a still minors which the still minors which they were still minors, which their affidavit must show. In all cases the oath of alle-giance to the United States is required, for which a form will be sent. The check or money order enclosed for the \$5 fee should be made payable to the Disbursing Clerk of the State Department. If a personal check is enclosed, it must be certified by the bank

A passport is good for only two years from its date. A new one may be had at any time by giving date and number of the old one, and enclosing another fee of \$5 and sufficient evidence that the applicant is in this country at the time of application. If in a foreign country, one can procure a

passport only through the Minister or other diplomatic representative of the United States to that country, or in his absence through the Consul-General, if any, or finally through a Consul. Professional titles are not inserted in passports.

#### Naturalization.

The several States confer the right to vote within their borders, but only the General Government has the power of naturalization. About one-half of the States allow only native born or naturalized citizens to vote; the rest admit aliens who have formally declared their intention to become citizens. In Minnesota they may vote four months after landing, if they then at once declared their intention of citizenship. But full naturalization, after the required five years' residence, does not confer the right to vote in any State, unless the laws of that State admit him to citizenship.

The Federal laws for naturalization are uniform, however, for the whole country. An alien desiring to be naturalized must declare upon oath before a circuit or district court of the United States, or a district or supreme court of the Territories, or a court of record of any of the States having comon-law jurisdiction, and a seal and clerk, two years at least prior to his admission, that it is bona fide his intention to become a citizen of the United States, and to renounce forever all allegiance and fidelity to any foreign prince or State, and particularly to the one of which he may be at the time a citizen or sul-ject.

At the time of his application to be admitted he must declare on oath, beforesome one of the courts specified, "that he will support the Constitution of the United States, and that he absolutely and entirely renounces and abjures all allegiance and fidelity to every foreign prince, potentate, State, or sovereignty, and particularly, by name, to the prince, potentate, State, or sovereignty of which he was before a citizer or subject," which proceedings must be reco. ded by the clerk of the court.

If it shall appear to the satisfaction of the court to which the alien has applied that he

If it shalf appear to the satisfaction of the court to which the alien has applied that he has resided continuously within the United States for at least five years, and within the State or Territory where such court is at the time held, one year at least, and that during that time "he has behaved as a man of good moral character, attached to the

principles of the Constitution of the United State-, and well disposed to the good order and happiness of the same," he will be admitted to citizenship.

If the applicant has borne any hereditary title or order of nobility, he must make an express renunciation of the same at the time

of his application.

Any alien of the age of twenty-one years and upward, who has been in the armies of the United States and honorably discharged therefrom, may become a citizen on his petition, without any previous declaration of his intention, provided that he has resided in the United States at least one year previous to his application, and is of good moral character.

Any alien under the age of twenty-one years who has resided in the United States three years next preceding his arriving at that age, and who has continued to reside therein to the time he may make application to be admitted a citizen thereof, may, after he arrives at the age of twenty-one years, and after he has resided five years within the United States, including the three years of his minority, be admitted a citizen; but he must make a decisration on oath and prove to the satisfaction of the court that for two years next preceding it has been his intention to become a citizen.

The children of persons who have been duly naturalized, being under the age of sixteen years at the time of the naturalization of their parents, shall, if dwelling in the United States, be considered as citizens. The children of persons who now are or have been citizens of the United States are, though born out of the limits and jurisdiction of the United States, considered as citizens thereof.

The naturalization laws are contained in Sections 2165-74, U. S. Revised Statutes. Section 2000 declares that "all naturalized citizens of the United States while in foreign countries are entitled to and shall receive from this government the same protection of persons and property which is accorded to native-born citizens."

# Voters in Michigan.

Article VII., Section 1, of the State Constitution prescribes the qualifications of voters in this State, as follows:
"In all elections every male citizen, every

"In all elections every male citizen, every male inhabitant residing in the State on the twenty-fourth day of June, one thousand eight hundred and thirty-five, every male inhabitant residing in the State on the first day of January, one thousand eight hundred and fifty, who has declared his intention to become a citizen of the United States, pursuant to the laws thereof, six months preceding an election, or who has resided in this State two years and six months and declared his intention as aforesaid, and every civilized male inhabitant of Indian descent, a native of the United States, and not a member of any tribe, shall be an elector and entitled to vote; but no citizen or inhabitant shall be an elector, or entitled to vote at any election, unless he shall be above the age of twenty-one years and has

resided in this State three months and in the township or ward in which he offers to vote ten days next preceding such elec-

Provided, That in time of war, insurrection, or rebellion, no qualified elector in the actual military service of the United States, or of this State, in the army or navy thereof, shall be deprived of his vote by reason of his absence from the township, ward, or State, in which he resides; and the Legislature shall have the power and shall provide the manner in which, and the time and place at which, such absent electors may vote, and for the canvass and return of their votes to the township or ward election district in which they respectively reside, or otherwise."

A recent Supreme Court decision compels registration and voting by non-householders in the township or ward where they get

their meals.

#### How to Get a Patent.

As in the case of naturalization, only the United States Government has the power to issue patents. They are granted by the Patent Office, upon proper application and proof of originality and utility, to any person, whether citizen or alien, who has invented or discovered a new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned; and by any person who, by his own industry, genius, efforts, and expense has invented and produced a new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief, a new and original design for the printing of woolen, silk, cotton, or other fabrics; any new and original impression, ornament, pattern, print, or picture to be printed, painted, east, or otherwise placed on or worked into any article of manufacture; or any new. useful, and original shape or configuration of any article of manufacture; or any new. useful, and original shape or configuration of any article of manufacture; or any new. useful, and original shape or configuration of any article of manufacture; or any new. useful, and original shape or configuration of the fees required by law and other due proceedings had.

A patent confers upon the patentee, his heirs and assigns, the exclusive right to make, use, and sell his invention or discovery in any part of the United States, for the period of 17 years. Extensions of this time are frequently made by act of Congress; and the Patent Office will make a reissue to the patentee or his legal representatives, upon proof that a specification in the original claim was insufficient or defective, or that the patent is invalid or inoperative because the applicant claimed more than was original or new, if his error arose, as often happens, from inadvertence, mistake, or accident, and not from an intention to deceive and defraud. When a patent was issued and assigned before July 8, 1870, application for reissue may be made by assignes; if since that date, the inventor himself must make the proper application and affidavit, if he is living. Assignment may be made in writing of a patent or any interestinone; and an assignee, as well as the original patentee or his representatives, may grant exclusive rights under a patent for the whole or any part of the United States. The instrument of assignment must be recorded in the Patent Office.

An inventor is not refused a patent if it is found that his device or discovery, or any part of it, had been known or used in a foreign country, if it had not been patented or described in print before his application, and he believed himself to be the original inventor or discoverer. Joint inventors take a joint patent; they cannot each have one. On the other hand, inventors of separate improvements in the same machine cannot take a joint patent for their several inventions. If the inventor is associated with another who furnishes capital for their partnership in an invention, they may become joint patentees, though not allowed to apply as joint inventors. An inventor is not debarred by his letters-patent from a foreign government from obtaining a patent in this country, if his invention has not

come into public use here more than two years before his application. His American patent, however, will be limited in time to the life of his foreign one; or, if he has more than one, the shortest unexpired term among them will govern the duration of his patent here. In no case will it exceed the regular limit of 17 years.

regular limit of 17 years.

An application for a patent is made to the Commissioner of Patents, at Washington, and must be written, or part written and part printed. The applicant makes eath that he verily believes himself to be the original and first inventor or discoverer of the art, machine manufacture composition or inventor machine, manufacture, composition, or improvement for which he asks a patent, and that he does not know or believe that the same was ever before known or used, and he shall state of what country he is a citizen. The oath may be taken before any person in the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, charge de affaires, consul, or commercial agent, holding commission under the Government of the United States, or before any notary of the foreign country in which the applicant may be. A full de-scription of the invention must be filed, and of the process of making, constructing, or compounding, and of using it, in terms so compounding, and of using 10, in terms so full, clear, concise, and nearly exact that any person skilled in the science or art to which it pertains, or most pertains, may similarly make and use it. If it is a ma-caine, its principle must be explained, also the best method which the inventor contemplates of applying the principle, so that the new device may be plainly distinguished from other inventions. He must particularly indicate and base his claim upon that part, combination, or improvement which he combination, or improvement which he holds to be his own invention or discovery, If drawings illustrate it further, he must furnish one copy, signed by him or his attorney, with two witnesses; and if it can be represented by a model, he must supply one of convenient size, if requested by the Commissioner. missioner. The application, including the claim and specification, must be signed by the inventor and two witnesses.

A "caveat" is notice to the Patent Office

A "caveat" is notice to the Patent Office of claim as inventor to bar another patent for the same inventor to bar another patent of the same invention for one year, without notice to the caveator. It must specify the object and specialties of his invention, and ask protection of his right until his application is filed; must be limited to one invention or improvement, include a drawing if practicable, and be duly signed and sworn to. An alien may file a caveat, if he has lived in this country during the next preceding year, and declared his intention of citizenship.

citizenship.

Fees must be paid as follow: Application, \$15: issue of patent, \$20—on designs, for 31/4 years \$10, for 7 years \$15, for 14 years \$30, caveat, \$10; reissue of patent, \$30; disclaimer, \$10; copies of patent, etc., ten cents per 100 words; recording assignments or other papers of 300 words or less, \$1; 300 to 1000, \$2; over 1000, \$3.

The business of the Patent Office at Washington is far the largest of any similar bureau in the world, and is almost wholly of modern growth. From 1840 to 1850 but 5941 patents were issued from it; 1850-60, 21,428; 1860-70, 77,315; 1870-80, 140,375—a general rate of increase sixfold that of our population.

The Copyright Law.

Any citizen or resident of the United States may protect by copyright his interest in any book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or any painting, drawing, chromo, statue or statuary, and models or designs to be perfected as works of fine art, of his authorship, device, or ownership. If a dramatic composition, he may similarly control its public performance. Copyrights are procured of the Librarian of Congress, who may be informally addressed at Washington, D. C., without affidavit. The name and residence of the applicant should be stated, and whether he claims as author, designer, or proprietor. In case of a book or other publication having a title-page, a copy of this page should be enclosed, or the printed title of anything else having such title. A description of any other production entitled to copyright is sufficient. A title or title-page may be in different type from that in which it will finally appear; and the print of a type-writer will do, if on paper at least as large as commercial-note. Titles of periodicals to be copyrighted must give number and date. Any citizen or resident of the United States be copyrighted must give number and date.

Application for copyright must be made before publication. The copyright is commonly granted as of course, without hindrance or delay, and without charge, except a fee of fifty cents for recording it and for each copy of the record or certificate of copyright. If the right should be assigned, the instrument of content power to be recorded. the instrument of assignment must be re-corded in the Librarian's office, at a cost of \$1, and as much for a certified copy of it. Every copy of a copyrighted book must

contain upon the title-page or the next folcontain upon the title-page or the next following one, and other productions somewhere upon them, a notice in these words:

"Entered according to act of Congress, in the year —, by —, in the office of the Librarian of Congress, at Washington": or simply these, "Copyrighted, — [the year], by —," The latter form is now commonly used. The word "by" should not be omitted in either case. If an author desires to hold the right to translate or descriptions. omitted in either case. If an author desires to hold the right to translate or dramatize his work, or both, he should print underneath the ordinary notice the words: "Right of translation reserved," or, in the latter case, "All rights reserved," and notify the Librarian of such addition. Using a notice of copyright, or equivalent words, without obtaining copyright, subjects the offender to a fine of \$100.

to a fine of \$100.

Within ten days after publication of a book, two copies of the best edition must be sent to the Librarian of Congress, postage or expressage prepaid, or under labels which he will send, that will carry them free through the mails. Neglect to send nullifies the copyright, and renders the responsible person liable to a fine of \$25.

A convright runs for twenty-eight years.

A copyright runs for twenty-eight years. A copyright runs for twenty-eight years Six months before that term expires appli-cation for renewal may be made by the original applicant, or, in case of his death, by his widow or children, accompanied by a full statement of authorship or relationship, and the date and place of entry of the original copyright. Newspaper advertisement of renewal must be made for four weeks, within two months of date of issue of the renewal certificate. A renewal is for the reviewed for renewal to find the renewal to the renewa period of seventeer years.

Internal Rev	en
Ale, per bbl. of 31 gallons \$1 00	Lic
Banks and bankers, on average amount	1
of circulation, each month. 1-12 of 1 per ct.	Ma
Banks, on average amount of circula-	Ma
tion, beyond 90 per cent of the capital,	_ v
an additional tax each month, 1-6 of 1 per ct.	Re
Banks, persons, firms, associations, etc.,	l ~ t
on amount of notes of any person,	Sn
firm, association (other than a na-	ct
tional banking association), corpora-	Sp
tion, State bank, or State banking association, town, city, or municipal	To
corporation, used and paid out as cir-	To
culation	To
Banks, persons, firms, associations	To
(other than national bank associa-	a
tions), and every corporation, State	9
bank or State banking association,	r
on the amount of their own notes	ō
used for circulation and paid out by	_ a
them	To
them	T t
Brandy, per gallon	Tol
Brewers, manufacturing our boils, or	Tol
Provide manufacturing loss than 500	h
bbls. annually 50 00	Tol
Cigars, manufacturers of, special tax 6 00	0
Cigars of all descriptions, made of to-	WŁ
bacco or any substitute, per 1000 3 00	Wi
Cigarettes, not weighing more than 8	n
lbs. per 1000. per 1000 50	Ţ
Cigarettes, weight exceeding 8 lbs. per	fı
1009, per 1000	þ
Cigars or cigarettes, imported, in addi-	b
tion to import duty to pay same as above.	s) ir
Liquors, fermented, per bbl 1 00	tı
Liquors, distilled, per gallon 90	p
Liquor dealers (wholesale), special tax, 100 00	Imi
Malt liquor dealers (wholesale) 50 00	tl
, , , , , , , , , , , , , , , , , , , ,	
	•

venue Taxes.					
,	Liquor dealers (retail), special tax	20 00			
	Malt liquor dealers (retail)	20 W			
	Manufacturers of stills, for each still or	30 W			
	worm made.	20 00			
	Rectifiers, special tax, less than 500	20 00			
	bbls., \$100; above 500 bbls.	200 00			
	Snuff, or snuff flour, manufactured of	•••			
	tobacco, or any substitute, per lb	8			
	Spirits distilled, per proof gallon	90			
	Todacco, all kinds, per lb	8			
	Tobacco, dealers in manufactured	2 40			
	Tobacco, manufacturers of	6 00			
	Tobacco, dealers in leaf, wholesale Tobacco, dealers in leaf, retail, \$250,	12 00			
	Tobacco, dealers in leaf, retail, \$250,				
	and 30 cents per dollar on sales above				
	\$500 per annum. But farmers and				
	producers may sell tobacco of their				
	own raising to consumers to the amount of \$100 annually.				
	Tobacco peddlers, traveling with more				
	than two horses, mules, etc	30 00			
	Tobacco peddlers, traveling with two	00 00			
	horses, mules, or other animals	15 00			
	Tobacco peddlers, traveling with one				
	horse, mule, or other animal	7 20			
ı	Tobacco peddlers, traveling on foot,				
ı	or by public conveyance	<b>3 6</b> 0			
	Whiskey, per proof gallon	90			
i	Wines and champagne (imitation) not				
	made from grapes grown in the				
ì	United States, and liquors not made				
ı	from grapes, currants, rhubarb, or				
١	berries grown in the United States,				
ı	but rectified or mixed with distilled				
I	spirits, or by infusion of any matter				
ı	in spirits, to be sold as wine or substi- tute for it, per bottle of more than a				
Į	pint and not more than a quart	20			
1	Imitation wines, containing not more				
ļ	than one pint, per bottle	10			
	pour, per source	-			

## The Civil Service System.

January 16, 1883, an act of Congress was passed "to regulate and improve the civil service of the United States," to which some amendments have been made. Its purpose is declared in the act to be "for open, competitive examinations for testing the fitness of applicants for the public service, now classified, or to be classified hereafter. Such examinations shall be practical in their character, and so far as may be shall relate to those matters which will fairly test the relative capacity and fitness of the persons examined to discharge the duties of the service into which they seek to be appointed;" also, "There shall be non-competitive examinations in all proper cases before the commission, when competent persons do not compete, after notice has been given of the vacancy." Under this law a Civil Service Commission of three persons, also a Chief Examiner and a Secretary, are appointed by the President; and they execute the law and the regulations prescribed by or under it. The central office of the Commission is at Washington, but they appoint Examining Boards, each of three resident officers of the United States, for that city and for each State and

Territory where examinations occur.

The act establishes three branches of the Gvil Service: 1. The Classified Departmental Service, embracing all places in the departments of the Government at Washington, which pay salaries of \$720 a year or more. 2. The Classified Customs Service in customs districts having 50 or more officers, and embracing all places paying at least \$900 a year, when the appointee is not confirmed by the Senate. 3. The Classified Fostal Service, including all places above laborer's grade, in post-offices with at least 50 employees. In the Departmental Service examinations are held only for the Department of State, the Patent, Pension, and Signal Bureaus, the Geological Survey, and some other minor offices. When special technical qualifications are required, special examinations are made. Confidential clerks of heads of departments or offices, cashiers of collectors and postmasters, superintendents of money-order divisions in post-offices, custodians of money for whose fidelity another officer is under bond, disbursing officers who give bonds, persons in the secret service, translators, interpreters, stenographers, persons whose employment is exclusively professional, and chief of divisions or bureaus; also officers confirmed by the Senate, laborers, and work-

men, are not under the provisions of the act.
Applicants for examination with a view
to appointment in the Civil Service of the
United States must be citizens of proper
age (18 to 45 in the Departmental and Customs, 16 to 35 in the Postal Service, except

messengers, stampers, and other junior assistants in the last, who are to be at least 14), must not use intoxicants habitually, and must give proof of mental and physical sufficiency. The limitations of age, however, do not apply to soldiers and sailors of the Union honorably discharged, nor to any person taking special examination for a place requiring peculiar information or technical skill. No sex, color, political or religious opinion, bars an applicant. Application must be made upon a blank, which for the Departmental Service may be had of the Secretary of the Commission, at Washington; for other services, of the Secretary of the State or Territorial Examining Board, at the office where appointment is sought—in Michigan only Detroit for the Postal, and Detroit and Port Huron for the Customs Service. The blank, when filled and signed, is returned to the same office.

General examinations are required only in the Customs and Departmental Services for clerkships of \$1000 and upward, requiring no special information or skill, and are limited to the following subjects: 1, Orthography, penmanship, and copying; 2, Arithmetic—fundamental rules, fractions, and percentage; 3, Interest. discount, elements of book-keeping and accounts; 4, Elements of the English language, letter-writing, and the proper construction of sentences; 5, Elements of geography, history, and the government of the United States. For places in which less education will suffice, as for employ in the post-offices and those below the grade of clerks in custom houses and in the departments, the Commission limits the examination to less than these five subjects, omitting the third and parts of the fourth and fifth; this is known as the limited examination. No one will be certified for appointment whose standing upon a just grading in the general or limited examination is less than 65 per cent of complete proficiency in the three first subjects. Competitive examinations to test the fitness of persons in the service for promotion therein, are also provided. Those who pass the examination are graded and registered, and the Commission gives a certificate to the person, stating the grade which he has attained on examination and his proficiency in the several subjects, as shown by the markings.

In the matter of appointments, when a vacancy occurs the appointing officer applies to the Commission or Examining Board, and is given the names of four applicants of highest standing in his branch of service who remain eligible; from these a selection must be made. The appointment, however, is probationary for six months, after which it may be revoked or made absolute, upon satisfactory evidence of conduct and ability in the office.

#### Ballot Reform Laws.

Laws for ballot reform have been passed in Michigan, Connecticut, Indiana, Massachusetts, Minnesota, Montana, Missouri, Rhode Island, Tennessee, and Wisconsin. The first election under these laws took. or will take place, in Montana, Oct. 1, 1889; Connecticut (municipal only), Oct., 1889; Mass. and Mich., Nov. 5, 1889; Tennessee, Jan., 1890; Minnesota (municipal), March, 1890; Rhode Island, April 2, 1890; Wisconsin (municipal), 1890; Missouri and Indiana, Nov. 4, 1890. Reform bills were passed, but not signed by the Governor, in New York and D'kota. Bills were rejected in the

house where first offered in California, belaware, Illinois, Maine, New Hampshire, Ohio, Fennsylvania; in the second house, after passing the other, in Arkansas and Nebraska; in Colorado, Kansas, New Jersey, Oregon, and Texas, bills were introduced, but not reached on the calendar; in Iowa, Louisiana, Maryland, Vermont, and West Virginia, the subject was more or less discussed, but no bills introduced; and in the Carolinas and Virginia it received no attention.

Under recent annexations Chicago has now a site of 169 square miles.

## Marriage Laws.

The ages at which license to marry is granted are 21 years for men in Alabama, Arkansas, California, Connecticut, Florida, Illinois, Indiana, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi. Missouri, Nebraska, North Carolina, Ohio, Pennsylvania, Texas, Vermont, Virginia, West Virginia, and Wyoming; and 18 years for females (without consent of parents) in the same, except Connecticut, Florida, Kentucky, Louisiana, North Carolina, Pennsylvania, Virginia, and West Virginia, where it is 21 years. Thirteen Carolina, Pennsylvania, Virginia, and West Virginia, where it is 21 years. Thirteen other States and Territories (37 in all) re-quire license, but do not limit ages.

The degrees of relationship within which marriage is prohibited are lineal ances-tors and descendants, brothers, sisters nephews, and nieces in all the States and Territories except New York and Louisiana, Territories except New York and Louisiana, which do not prevent nephews and nieces, and Florida and Georgia, which simply bar marriage "within the Levitical degrees." The marriage of first cousins is also prohibited in Arkansas, Dakota, Indiana, Kansas, Montana, Nevada, New Hampshire, Ohio, Washington Territory, and Wyoming. A marriage is voidable at the option of either of the parties, if contracted under age of consent and no cohabitation has occurred after age was attained, or if either

curred after age was attained, or if either party is idiotic or insane, in Arizona, Cali-fornia, (which adds impotence), Minnesota, Nebraska, Nevada, Oregon, Washington, Nebraska, Nevada, Oregon, Washington, and Wisconsin. Connecticut, Dakota, Michigan, New York, and Utah, the same as California. Arkansas and Idaho include all under age of consent, the insane, idiotic, and impotent, and where consent was obtained impotent, and where consent was obtained by force. Delaware allows only the insane or idiotic to nullify a marriage; Indiana, Iowa, Kansas, and Wyoming, the same, and those under age of consent; Kentucky, consent obtained by fraud or force, and those under the age of consent, if no cohabitation under the age or consent, it no consolutions after age; Louisiana, the former only, if no cohabitation before suit is brought to break the marriage; South Carolina, the former, if marriage not consummated; New Mexico, under age of consent only; Texas, physical incapacity; Virginia, if within the prohibited degrees, insane, idiotic, or impotent; West Virginia, the same, also if under age of consent, or a white person married to a of consent, or a white person married to a negro while a former spouse is living. Other States and Territories have no provisions on the subject.

In Alabama marriages are altogether void, without action of the parties, if within the prohibited degrees or either is of negro blood and the other a white. In Arizona, the same, also bigamous marriages and of the other a white. those insane when wedded, under age of consent, or of white with one of Indian or Mongolian blood, for force or fraud, or sen-tence to imprisonment for life. Georgia names the prohibited degrees, bigamous, insane at marriage, impotent, white with negro blood, force or fraud. Arkansas voids marriages within prohibited degrees, bigamous, under age of consent, and of white with negro blood. California the same, omitting age of consent; and so Colorado, Delaware, Indiana (also if Colorado, Delaware, Indiana (also if insane when married), Maryland, Missisppi, and Missouri. Nebraska holds the same as Indiana. Connecticut and Kansas proscribe only the prohibited degrees; Dakota, Idaho, Iowa, Montana, New Hampshire, Ohio, Pennsylvania, and Vermont, simply add bigamous marriages; to both of these Kentucky adds under age of consent, insane when married,

impotent, white with negro; Maine and Illinois add the insane when married and white with negro; Maine an? imprisonment for life; Massachusetts, under age of consent and no cohabitation, insane when married; Michigan the same, also imprisonment for life, and force or fraud; Wyoming, as Michigan, except imprisonment; Minnesota, same as Dakota and there and undergraph of the Married Married Consent New Married C others, and under age of consent; New Mexico the same, but without cohabitation; Nevada adds to the Dakota prescriptions white with negro blood, Indian or Mongolian; New York, imprisonment for life; North Carolina, under age of consent, incompanion of the consent of the conse sane when married, impotent, white with negro or Indian; Rhode Island, insane when married; and Wisconsin the same, also life imprisonment. Bigamous unions only are void in Louisiana; bigamous and impotent in New Jersey; bigamous and of whites with negroes in Florida; same, but including Mongolians, in Oregon; bigamous, insans when married, and white with negro or Indian in South Carolina; same in Tenessee, except Indian; Virginia, bigamy, under age of consent without consbitation. white with negro, insane when married, and impotent. Texas omits bigamous, and prescribes under age of consent, impotent white with negro. West Virginia, Washington and Utah Territories, and the District of Columbia, do not expressly provide for void marriages; and the two last, with Florida, Georgia, Illinois, Maine, Maryland, Massachusetts, Mississippi, Missouri, Mortana, New Hampshire, New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island, and Tennessee, not for voidable ma white with negro, insane when married, and and Tennessee, not for voidable ma-

The legal age of consent to marriage is for males and females, respectively, 14 and 12 (as under common law, there being no statutory prescription) in Arizona, Colorado, Connecticut, Delaware, District of Columbia, Florida, Kansas, Maine, Maryland, Massachusetts, Mississippi, Missouri, New Jersey, Pennsylvania, Rhode Island. South Carolina, Tennessee, Utah, and Vermont; same ages by statute in Kentucky, Virginia, and West Virginia; 16 and 14 in Louisiana. New Hampshire, and Texas; 17 and 14 in Alabama, Arkansas, Georgia, and Illinois; 18 and 15 in California, Dakota, Minnesota, New Mexico, Oregon, and Wisconsin; 18 and 16 in Idaho, Indiana, Michigan, Nebraska, Nevada, Ohio, and Wyoming; Montana and Washington Territories, 21 and 18; New York, 21 and 14 Missouri allows marriage simply upon reconstructions of the colleged by calculated and bits. The legal age of consent to marriage is Missouri allows marriage simply upon agreement of parties, followed by cohabita-tion; California upon consent, and assump-

tion of marital relations.

The age of consent by girls to illicit intercourse, without undeniable presumption of violence, is only 7 years in Delaware; 10 in Alabama, California, Florida, Georgia, North and South Carolina, Texas, District of Columbia, Maryland, Minnesota, Wyoning, Arkansas, Utah, Montana, Arizona, and Rhode Island; 11 in Vermont; 12 in Missouri, Indiana, Nevada, Virginia, West Virginia, and Idaho; 13 in Massachusetts, Iowa, and Maine; 14 in Illinois, Dakota, Connecticut, New Hexico, and Michigan (raised from 16 in 1887); 15 in Nebraska; 16 in Pennsylvania, Kentucky, New York, New Jersey, and Washington; and 18 in Mississippi, Colorado, and Kansas. tion of marital relations. and Kansas.

In some States, as now in Michigan, an official license to marry must be procured. Here it is had from the county clerk, on

payment of a small fee.

#### Divorce Laws.

All the States and Territories have laws allowing divorce from the marriage con-tract, except South Carolina and New Mexico, and in all but these infidelity, or viola-tion of the marital vow, is a sufficient ground for absolute divorce. Other causes are as follow: Impotence, or physical in-ability, in all the States except California, ability, in all the States except California, Connecticut, Dakota, Iowa, Louisiana, New Mexico, New York, South Carolina, Texas and Vermont. In most of these it renders marriage voidable. Wilful desertion for one year, in Arkansas, California, Colorado, Dakota, Florida, Idaho, Kansas, Kentucky, Misser Mortene Wester & Wester kota, Florida, Idaho, Kansas, Kentucky, Mis-souri, Montana, Nevada, Utah, Wisconsin, Washington, and Wyoming; two years, in Alabama, Arizona, Illinois, Indiana, Iowa, Michigan, Mississippi, Nebraska, Pennsyl-vania, and Tennessee; three years, in Con-necticut, Delaware, Georgia, Maine, Mary-land, Massachusetts, Minnesota, New Hampshire, New Jersey, Ohio, Oregon, Texas, Vermont, and West Virginia; five years, in Virginia and Rhode Island, though the court may in the latter State decree years, in Virginia and Rhode Island, though the court may in the latter State decree divorce for a shorter period. Habitual drunkenness, in all States and Territories except Maryland, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Texas, Vermont, Virginia, and West Virginia. Imprisonment for felony, or conviction of felony in all (with sundry limitations) except Dakota, Florida, Maine, Maryland, New Jersey, New Mexico, New York, North Carolina, South Carolina, and Utah. Cruel and abusive or inhuman treatment, intolerable, extreme, or repeated cruelty, intolerable, extreme, or repeated cruelty, as variously prescribed, in all except New Jersey, New Mexico, New York, North Carolina, South Carolina, Virginia, and West Virginia. Failure by the husband to provide, one year in California, Colorado, Dates Novada and Wyomiya. vide, one year in California, Colorado, Dakota, Nevada, and Wyoming; two years in Indiana and Idaho; no time specified in Arizona, Idaho, Massachusetts, Michigan, Maine, Nebraska, Rhode Island, Vermont, and Wisconsin; wilful neglect for three years, in Delaware. Fraud and fraudulent contract in Arizona, Connecticut, Georgia, Idaho, Kansas, Kentucky, Ohlo, Pennsylvania, and Washington. Absence without heing heard from three years in New Idaho, Kansas, Kentucky, Ohio, Pennsylvania, and Washington. Absence without being heard from, three years in New Hampshire; seven years in Connecticut and Vermoat; separation five years, in Kentucky; voluntary separation, five years, in Kentucky; voluntary separation, five years, in Wisconsin. When reasonably presumed dead by the court, in Rhode Island. Ungovernable temper, in Florida; cruel treatment, outrages or excesses as to render their living together insupportable, in Arkansas, Kentucky, Louisiana, Missouri, Tennessee, and Texas; such indignities as to render life burdensome, in Missouri, Oregon, Pennsylvania, Tennessee, Washington, and Wyoming; husband notoriously immoral before marriage, unknown to wife, in West Virginia; fugitive from justice, in Virginia; gross misbehavior or wickedness, in Rhode Island; any gross nezlect of duty, in Kansas and Ohio; attempt on life, in Illinois; refusal of wife to remove into the state, in Tennessee; mental incapacity at time of marriage in Georgie; three years with any Tennessee; mental incapacity at time of marriage, in Georgia; three years with any religious society that believes the marriage relation unlawful, in Massachusetts; joining any religious sect that believes marriage unlawful, and refusing to cohabit six months, in New Hampshire; parties cannot live in peace and union, Utah; settled aversion, which tends to permanently destroy all peace and

happiness, in Kentucky. All these, and others before mentioned, are for full or absolute divorce. Collusion or connivance with a view to divorce, and condonation of infidelity to the vow, are in all cases provided against. In Georgia an absolute divorce is granted only after the concurrent verdict of two juries, at different terms of the court. In New York absolute divorce is granted but for one cause, adultery.

Connecticut, Illinois, Kentucky, and Missouri make no restriction upon marriage of divorced persons. Either party may remarry, but in Massachusetts defendant must wait two years, and then obtain permission from the court. A decree of the court may restrain the guilty party from remarrying in Virginia. Parties cannot remarry until after two years, except by permission of the court, in Maine. In New York plaintiff may remarry, but defendant cannot do so during the former's lifetime, unless the decree be modified or proof is given that five years have elapsed and that complainant has married again and defendant's conduct has been uniformly good. Any violation of this is punished as bigamy, even though the other party has been married. In Delaware, Pennsylvania, and Tennessee, no wife or husband divorced for violation of the marriage vow can marry the partner of the crime during the life of the former husband or wife, nor in Louisiana at any time; such marriage in Louisiana makes the person divorced guilty of bigamy.

În order to bring suit for divorce, previous residence is required, in Dakota, of ninety days; California, Indiana, Idaho, Nebraska, Nevada, New Mexico, Texas, and Wyoming, six months; Alabama, Arizona, Arkansas, Colorado, Illinois, Iowa, Kansas, Kentucky. Maine, Minnesota, Mississippi, Michigan, Missouri, Montana, New Hampshire, Ohio. Oregon, Pennsylvania, Utah, Vermont (both parties as husband and wife), West Virginia, Washington, and Wisconsin, one year; Florida, Maryland, North Carolina, Rhode Island, and Tennessee, two years; Connecticut and Massachusetts (if, when married, both parties were residents; otherwise five years, three years.

wise five years, three years.
Courts in all the States, especially in New York, are exceedingly jealous as to their jurisdiction, and usually decline to recognize the validity of a divorce granted against the citizen of a state in which the court has jurisdiction, by the court of another state, unless both parties to the suit were subject at the time to the jurisdiction of the court granting the divorce. Kansas courts grant divorces if the applicant's husband or wife has obtained a divorce in another State and the applicant has been forbidden to remarry. If a wife in New York obtains a divorce on that he applicant has been forbidden to remarry, he may go to Kansas and obtain a divorce on that ground. If his wife contests the case, or can be served with the papers in Kansas, so that she is brought under the jurisdiction of the Kansas court, the courts of New York must recognize the divorce as valid, and cannot punish the husband for remarrying in New York. The latter State permits a sort of polygamy and polyandry in certain cases. Desertion for five years, without knowledge that the deserter is living, permits the one deserted to marry again; and the second marriage is valid, though the deserter returns.

The Government System of Land Surveys.

The system of surveying the public lands of the United States was adopted in 1785, by the Tenth Continental Congress, and is by some attributed to Thomas Jefferson, chairman of the committee which reported it, but more probably had its origin with Captain Thomas Hutchins, then filling an office known as Geographer of the United States. The original system proposed the subdivision of lands into "hundreds," or tracts ten miles square, each to be further subdivided into plats one mile square, numbered from 1 to 100, similarly to our present townships. But on motion of Col. James Monroe afterwards President Monroe, the tract of six miles square, or township, was adopted. Previous to this time, the tracts surveyed upon the Connecticut or Western Reserve, in Northern Ohio ware five wiles square,

in Northern Ohio, were five miles square. Under the later system a series of principal meridians, or north and south lines, taken as lines of departure for the successive surveys, has been established, and now numbers 24, extending from Ohio to the Pacific coast. These are not necessarily fixed upon even degrees of longitude, but are placed arbitrarily at the convenience of surveyors, frequently running north from the junction or confluence of streams. first principal meridian, for example, was projected from the point of union of the Great Miami and Ohio rivers, forms the boundary between Ohio and Indiana, and governs recent surveys in the former State. The second runs from a point near the junction of the Little Blue and Ohio rivers, in longitude 86° 28' west from Greenwich, and prevalls in Indiana and part of the Illinois surveys. The third, starting from the mouth of the Illinois, rule in the remainder of Illinois, and in Wisconsin and Northern Minnesota. The fifth, from the mouth of the Arkansas, is the standard meridian for Arkansas, Missouri, Iowa, the rest of Minne-sota, and Dakota east of the Missouri river. The sixth is on the meridian of 97° 22°, and controls in Kansas, Nebraska, Dakota be-yond the Missouri, Wyoming, and nearly all Colorado. The remaining 18 meridians have geographical names instead of numbers. The Michigan meridian was surveyed from the junction of the Auglaize and the Maumee, in Northwestern Ohio, but is used only north of the Michigan boundary and in north of the Michigan boundary and in Michigan. The Tallahassee, St. Stephen's, Huntsville, Choctaw, Washington (Miss.), St. Helena, and Louisiana meridians govern surveys in the Southern States; the Indian, in the Indian Territory; the New Mexico, those in that Territory and a part of Colorado; the Gila and Salt River, for Arizona; the Great Salt Lake, in Utah; the Boise, in Idaho: the Mt. Diablo in Newada, Central the Great Salt Lake, in Utah; the Boise, in Idaho; the Mt. Diablo, in Nevada, Central and Northeastern California; the San Bernardino, Southern California; Humboldt, Northwestern California; Willamette, Oregon and Washington; and Montana, for that Territory. The more northerly meridians are presumed to run to the international boundary, or the Canada line; but the first stops at the Michigan line, the third at Wisconsin and the sixth at the Missouri Birar consin, and the sixth at the Missouri River. At right angles with the principal merid-

ians—that is, on due east and west lines, but not necessarily on even parallels of latitude—base lines are drawn, the intersections being marked by substantial stone monuments. Sometimes, as in Michigan, the meridian runs both north and south of this line; sometimes altogether north of the base; very rarely, as the St. Helena merid-

ian, wholly south of its base line. From the base line new north and south lines are projected at intervals of six miles, and the tracts included between these lines are the "ranges," numbered east or principal meridian. As these west of the As these lines by the convexity of the earth constantly converge towards the pole, they are not exactly parallel, and the ranges narrow slightly as they push northward, and widen southward. The difference in the length of north lines and south lines of a township is thus about six rods, or 66 feet. To meet this difference six rods, or 66 feet. To meet this difference "correction lines" are surveyed parallel to the base line, at intervals varying in various parts of the country, sometimes at fifteen ownships' distance, sometimes at ten, as in Michigan, where the difference amounts to about 60 rods, or nearly one-fifth of a mile. The new meridians, or north and south lines, starting from this and bounding the ranges, are not, however, placed at this distance, but as much more as the lines will fall short of the right distance between them when they close on the next correc-tion line; so that the spaces between are ere of exactly the correct width, ex-midway between the corrections. nowhere There are seven correction lines in Michigan, the last of them far to the northward, in the Upper Peninsula. No such line is in the Upper remission. No such and required south of the base, as the distance to the State line is not sufficient to justify it. At right angles to the meridian lines, and at right angles to the meridian lines, and

At right angles to the meridian lines, and at distances of 24 miles, lines are surveyed parallel to the base line, and the tract between these and corresponding north and south base lines constitutes the typical surveyed county in Michigan. Nearly one-third of our counties approach closely to this measurement—24 miles square, or 576 square miles, with 16 even or entire surveyed townships. Several other of the counties are bounded on all sides by right lines, and contain none but entire townships. Oakland is five by five townships, 09 miles) square, containing 25 townships, or 900 square miles. Kent and Newaygo counties are six townships by four; Lenawee (nearly), Calhoun, Washtenaw, and Jackson, five by four, and so on. Like facts are not quite true of any

other State in the Union.

These surveyed tracts, or typical counties, are subdivided by corresponding lines each way at intervals of six miles, forming the townships, which are counted in order north or south of the base line, and in such or such ranges. These are further cut into tracts of one mile square, called "sections," of which a full township contains 36, numbered from the right upper or northeast corner to the left or northwest, then "?" in the section next adjoining on the south and in order back to the east, and so east and west, and west and east, until "30" is reached at the southeast corner. It is required that the intermediate section lines of the ranges be surveyed on true meridians, so that wherever the exterior north and south lines of the townships give a width less or more than six miles, the deficiency or excess falls on the western sections on half-sections in the township, and errors in running the meridians fall on the northern tier of sections. Thus all the sections in a township except those on the north and west are presumed to contain approximately 640 acres. Fractional townships are also thrown to the north and west of the tract surveyed, except those made fractional by lakes, rivers, and other natural boundaries.

The sections may be further divided into haives, quarters, eighths, and sixteenths (the last two being described as the half of a quarter and the quarter of a quarter). A tract of \$20 acres, for example, may be legally described as "the west half of section 6, in township 4 north, range 10 west of the principal meridian;" one of 160 acres

as "the southwest quarter of section 6," etc.; one of 30 acres as "the west half of the southwest quarter;" etc., and one of 40 as "the southwest quarter of the southwest quarter," etc. But land descriptions are exceedingly varied, according to the great variety in the size and location of the tracts described.

#### The Public Lands.

The public lands of the United States may be taken up under pre-emption, homesteed, timber-culture, or desert claims,—160 acres under each of the first three, or a section under the last. Pre-emptions can be taken upon unsurveyed, homesteads only upon surveyed land; but a pre-emption claim may be changed to a homestead entry after survey. Pre-empted land must be paid for at \$1.25 to \$2.50 an acre; while homesteads cost nothing but registry fees. Since 1800 actual settlement is necessary for homesteads as well as pre-emptions. Any citizen or intending citizen of the United States can take a homestead; and an honorably discharged soldier or sailor of the United States can take a homestead; and an honorably discharged soldier or sailor of the Union in the late Rebellion, having served 90 days or more, may deduct his time of service (and if discharged for w-unds or di-ability, his entire period of enlistment from the five year-required to perfect title, provided, in all cases, that settlement for at least one year-shall be made. Six menths are allowed after location and declaration to make entry and begin improvement. Widows and orphans of such soldiers and sailors inherit he same rights; and if the husband or father died during service, they are credited with his whole term of enlistment. Tree-claims may be entered by any citizen or intending citizen, at \$5 for 80 acres or less, besides Register's fees, and \$10 for 80 to 160 acres. One-sixteenth of the land must be broken or planted,—in case of 160 acres five

acres each of the first two years and the five acres broken the first year must be cropped the second and planted to treec the third; similarly subsequent years until the full required tract is planted. Title is not perfected until at least eight years after entry, and if the plant of any year is destroyed the time is extended accordingly. It must finally be shown that the claim has been cultivated for at least eight years; that not least han 2700 trees were planted on each acre, of which there remain growing at least 675. The claims are of course available only upon prairie lands, and timber-trees must be planted, not orchard-trees or hedge plants. Desert claims may be made only in New Mexico, Arizons, Utah, Wyoming, California, Nevada, Oregon, Washington, Idaho, Montana, and Dakota. Two witnesses, with presumptive proof of their honesty, and acquainted with the land, must make affidavit that it is actually desert, and the applicant must declare that it will not produce crops without irrigation, and that so far as he knows it has no valuable mineral upon or within it. He must then pay twenty-five cents an acre for it, and within three years show that he has successfully irrigated it, when it will be patented to him for \$1 additional. Right to use water from natural sources for such irrigation, and its use must in no case exceed that really necessary in reclaiming the land.

#### Pensions and How to Get Them.

Invalid pensions are granted by the General Government to former soldiers and sailors of the Union, honorably discharged, for total disability, resulting from actual service, at the rate of \$8 a month for privates and non-commissioned officers of the army and marine corps, and all enlisted men of the navy, except warrant officers, up to \$30 for lieutenant-colonels and higher officers in the army and marine corps, and exptain and higher officers of the navy; and corresponding rates for partial disability. Rates for specific disabilities are fixed by law at \$24 a month for any equivalent to loss of hand or foot; \$30 for such loss, or total disability to perform manual labor; \$31.25 for total disability in both feet; \$36 for loss or total disability of arm, leg, or one hand and one foot, or amputation at or above elbow or knee; \$45 for amputation at or above elbow or knee; \$45 for amputation at or near hip or shoulder-joint; \$50 for any disability requiring regular aid and attendance of another person; \$50 or \$72, according to date of claim, for total disability in both hands; and \$72 for loss of both hands are so allows attes for many disabilities not specified by law, from \$2 a month for loss of toe or finger, or small varicocele, to \$27 for nearly total deafness. Widows and children of those entitled to pensions if living, or other dependent relations, in the order of mother,

father, and brother and sister under 16 years, are also entitled. Certain service-pensions are allowed, but they are not yet general for the soldiers and sailors who served in the late rebellion.

The aid of a pension attorney is generally sought for the allowance or increase of a pension. But any one who deems himself entitled may write to Gen. Green B. Raum, Commissioner of Pensions, Washington, D. C., for a blank form of application suitable to his case, upon which a declaration of it must be carefully made out and sworn to, with evidence and witnesses as prescribed in the form. This may be returned to the Commissioner, and the instructions of the Bureau awaited for further procedure.

The number of pensioners upon the rolls June 30, 1889, was 489,729. Since 1861 1,248,416 pension claims had been filed, and 789,121 allowed; pending at above date, 479,000. Aggregate annual value of pensions, \$84,246,552,36; average annual value, \$131.18. Pensioners added during the fiscal year 1888-9, 53,675; dropped, from death and other causes, 16,507. Amount disbursed for pensions since 1861, \$1,052,218,413.17.

THE per capita consumption of malt liquors in this country in 1888 was 12.48 gallons, against 5.30 in 1870; of distilled liquors, 1.23, against 2.07 (214 in 1840), and of wines, 59, against .32. The use of the lighter liquors is thus increasing much faster than that of the stronger drinks.

## Liquor Legislation.

Only six States now retain laws for the prohibition of the liquor traffic within their limits.—Maine, New Hampshire, Vermont, Rhode Island, Iowa, and Kansas. Maine took the initiative with a report from a legislative committee, as long ago as 1887, that the license laws should be repealed and a prohibitory act passed. Like reports were made the next year to the legislatures of Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and Tennessee; but the first prohibitory law was not passed until 1846, in Maine. It was repealed ten years after, but a new one passed in 1838, which is still in force, with various changes and amendments. Prohibition has also been incorporated in the State Constitution. The people of New Hampshire adopted a similar law by a three-fourths vote in 1849, and is yet under another law of the kind passed in 1855. The present law of Vermont dates from 1852. Rhode Island had various prohibitory enactments from that year until 1887, when the existing ironclad statute was passed. Iowa enacted a prohibitory law in 1855, which became inoperative. In 1882 her people voted in favor of prohibitory law in 1855, which became interpretative in the statute followed two years later, which is still in force. Kansas has lad a prohibitory law since 1866, and a constitutional amendment to similar effect since 1880.

since 1880.

Attempts have been made in many other States to enforce prohibitory liquor laws. Delaware enacted one in 1847, which failed the next year for unconstitutionality. Michigan inserted in the State constitution of 1850 a clause prohibiting the grant of licenses to sell liquor. A prohibitory law was enacted in 1853, but declared unconstitutional the next year, and another passed in 1855. Twenty years afterwards it gave place to the present tax or modified license system. The legislature of 1887 passed a local-option act, under which thirty-six counties voted in favor of prohibition, when the law was declared unconstitutional by the Supreme Court, from a defective title. A constitutional amendment expressly

requiring prohibitory legislation was defeated in April. 1887, by a majority of 594. Minnesota in 1852 passed a prohibitory law which has given place to the local-option and high-license system. Massachusetts has had numerous laws and amendments for prohibition from that year until recent years, when a local-option law gives prohibition to about half the towns of the State. New York had prohibitory laws in 1853 and 1855. The first was vetoed, the second declared unconstitutional. Connecticut's law dated from 1854, but has given way to the local-option plan for towns. Indiana passed one in 1855, which divided the Supreme Court evenly on a constitutional question, and although this left the law in being, it soon became a dead leter. Nebraska had prohibition upon her statute book from 1855 to 1880; and Illinois attempted it in a former year, by a law which was not sustained by popular vote. In 1887 prohibitory constitutional amendments were defeated in Michigan, Oregon, Tennessee, and Texas.

Besides the States named as under local option, most of the Southern States—Alabama, Arkansas, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia—have adopted the plan, under which notably successful results are reported, particularly in Georgia Illinois had a local-option law as early as 1839, followed by several other States during the next eight years. Dakota has a local-

option law.

High license prevails in Illinois, Pennsylvania, and Minnesota, and the other States are generally under some sort of license system. Most of the States have laws restricting sales on Sunday and to minors, and in regard to hours of closing saloons and other regulations of the traffic. Thirty-six of the States and Territories now have laws requiring in the public schools scientific temperance teaching, or instruction in the effects of stimulants and narcotics upon the

title. | human system.

# Drinks of all Nations.

The following table exhibits at a glance the beverages of all nations:

	MIL	LION	s of Ls.	er da tripid
Countries.		Beer.	Spirits.	Alcohol, Galons per f
Great Britain	15	1007	87	1.9
France	760	190	76	2.6
Germany	120		60	1.60
Russia	80		145	1.0
Austria	300	245	80	1.4
Italy	480		10	
Spain	220	2	8	1.48
Portugal		1	1	1.5
Holland	8	85	12	
Denmark		25	- 8	2.60
Belgium		170	10	2.07
Norway and Sweden	2	35	27	2.27
British Colonies	108	81	20	1.80
United States	80	410	76	1.3
Total	2133	3194	473	1.70

Lager beer is commonly known as a German beverage, but in three countries of the world there is more beer drunk per capita than in Germany. The number of gallons drunk annually per person is: United States, 33; Belgium, 32; Great Britain, 22; Germany, 12; Denmark, 10½; Holland, 9; Austria, 7½; France, 4%; and Russia, 0% Belgium is the greatest brewing country in the world, producing annually 1.03,000,000 gallons; Great Britain, 900,000,000; Demark, 513,192,120; Germany, 30,000,000; and the United States, 18,000,000.

the United States, 18,000,000.

The usual percentage of alcohol, by volume, in the various drinks is about as follows: Beer 4, porter 4.5, ale 7.4, cider 8.6, perry 8.8. Wines—Elder 9.3, Moselle 9.6, Tokay 10.2, Rhine 11, orange 11.2, Bordeaux 11.5, hock 11.6, gooseberry 11.8, champagne 12.2, claret 13.8. Burgundy 13.6, California 14.5, Malaga 17.3, Canary 18.8, sherry and Vermouth 19, Malmsey 19.7, Marsala 20.2, Madeira 21, port 23.2, Curacoa 27, Anised 38, Maraschino 34, Chartreuse 43, gin 51.6, brandy 53.4, rum 53.7. Whiskey—Irish 53.9, Bourbon 54, rye 54, Scotch 54.8. "Proof spirit" contains 49.24 per cent of absolute alcohol by weight, or 57.06 in volume.

## Some Points of Legal Information.

[Adopted to Michigan by Hon. Isaac Marston, of the Detroit Bar. See also "Michigan Laws Epitomized."]

#### CONTRACTS.

A contract for the sale of real property must be in writing. A contract for the sale of goods, chattels, or things in action, having a price of \$50 or more, is void unless some memorandum or note of the transaction is made in writing and signed by the parties to it, or the buyer accepts and receives part of the goods or evi-dences of things in action, or at the time pays a part of the purchase money. A promise to answer for the debt or default of another is void, unless it is in writing or a note or memorandum of it be made and signed by the promisor. A lease for more than a year must be in writing; but a lease for a year or less, or an agreement to make a lease within a year, need not be written.

Written evidence is preferred before oral in the courts, as more likely to be correct. Evidence to contradict it or vary a written contract cannot be introduced, but may explain

it when necessary.

An agreement without consideration is not valid.

Each partner is responsible for all the debts of the partnership, unless it be special or lim-

#### NOTES.

The payee should be named in a promissory note, unless it is to be payable to bearer. A note or check may be payable to one's own order, but he must then endorse his name upon it. "Value received" is usually written in the note, but need not be, as the law presumes it or it may be proved orally. Notes bear interest only when it is mentioned, until they fall If no rate of interest is named, the rate at which is legal in the State. The time is that which is legal in the State. The time of payment must be specified and absolute, not dependent upon any contingency. A note or bill may be written upon any sort of paper or other substance, with ink, pencil, typewriter, or any other materials.

Promissory notes imply three days' grace, or that much more time for payment after maturity. Demand of payment should be made at the place specified in the note, if any, or at the residence or place of business of the persons held for its payment, within business of the persons held for its payment, within business hours. If no place is named in the note, reasonable diligence must be used to find the place of residence or business. If the party has run away or removed from the State, and no longer maintains a known place of business therein, there is no need of demand to make the endorser liable. If partners are jointly liable, notice to one is enough. A note payable on demand may be put in suit at once, but is barred by the statute of limitations in six years; and a demand note bearing interest is dishonored after a reasonable time beyond maturity, though not presented for payment. But any one who receives it from the payee after such time and without inquiry, even for value received, takes it under any defenses which the maker has against the

Formal protest of a note or bill is necessary to make endorsers liable for its payment. Such protest is made by a notary or any other person with a witness, who takes the note of bill to the proper place for presentment, de-mands acceptance or payment as the case re-quires, and certifies default, if any. Notice is then served at once upon the endorser, and erson with a witness, who takes the note or any other person that may be chargeable, directly or through the holder of the paper, who in turn notifies the parties. A letter containing notice of protest, properly prepaid and

placed in the mail, is sufficient, even though it be lost or miscarried. No cause of action is good against the endorser of a demand note payable at a particular place, until demand has been made as prescribed and notice of non-payment duly given. It makes no difference whether an endorsement is written on the face or back of a note or check. If an endorser wishes to avoid any liability for payment, he adds the words, "Without recourse," or some similar expression. Joint payees not partners must all join in endorsing. A note endorsed in blank—that is, with only the name of the endorser-is transferable by simple delivery, as if payable to bearer.

If a note or bill be transferred as security for a debt, the debt remains if the note or bill be dishonored. If transferred as payment and the creditor accepts it as such, the debt

is paid.

The loss of a note does not release the maker, who is held for its payment if the amount and consideration, and the title of the former holder to it, are proved, and the maker is protected by security upon payment.

The maker of an accommodation note or The maker of an accommodation note or bill—one which has no consideration, and is given merely to lend name or credit to the holder—is not bound to the original payee, but is held chargeable to all others who may hold it for consideration, if transferred before maturity.

A creditor taking the note of his debtor, payable on a fixed day or in future, suspends his right of action on the note until it has

#### CHECKS AND DRAFTS.

A bank can pay a depositor's money only according to his directions and in the regular course of business, and cannot charge against him any payment made without his authority as to the person, time, and amount of the

payment.
The holder of a check or draft should present it for payment within a reasonable time. One who transfers a check to another has a right to insist that it be presented within reasonable time, and the general rule is that it shall be presented on that day or at furthest the next day. Bills and drafts payable in the State, or checks payable at sight, on a specified day, or in any number of days after date, are without grace. Certifying a check does not bind the bank

to a guarantee of its genuineness in all respects, nor against alterations made in the body of it; and the statement of a bank officer that a check is genuine does not hold his bank for its payment.

#### PAYMENTS.

A payment on a general account is applied to the oldest items of account, in the absence directions from the debtor. Payment without direction on an account made up of several causes of action may be applied on any of them, at the time or afterwards, if the debtor do not meanwhile order otherwise. But if he designate a particular debt to which his payment shall apply, he must be obeyed. A cause of action is held to accrue upon open and mutual accounts from the date of the last item in the account on either side.

Statutes of limitation bar the right of action at law after a certain time, on legal pre-sumption of payment or settlement. In general, judgments of a court of record need not, but notes and contracts not under seal must be sued upon within six years. If the

debtor is out of the State, the six years do not begin to run until he returns, and successive absences may be summed up and deducted from the time. Part payment, after the lim-itation has expired, revives the debt for another six years from the time of such pay-ment. [See "Statutes of Limitation," below.]

#### INFANTS.

All persons in Michigan are legally deemed

infants while under twenty-one years of age, except that a woman may contract marriage at the age of eighteen. Also, a contract made by an infant for suitable necessaries for his own use is binding upon his individual property. But if they have been furnished to him by another, on account of his parent's neglect to supply them, the parent is chargeable. [For our law concerning married women, see "Some Michigan Laws Epitomized."]

#### The Several Statutes of Limitation.

Statutes of limitations presume settlement Statutes of limitations presume several of open accounts after one year in Pennsylvania; two years in Arizona, California, Florida Kentucky. Montana, Texas, and Utah; three in Alabama, Arkansas, District of Col-umbia, Florida, Illinois, Louisiana, Maryland, Mississippi, North Carolina, and Washington Territory; four in Georgia, Nebraska, New Mexico, and Wyoming; five in Indiana, Iowa, Kentucky, Missouri, and West Virginia; and six in the other States and Territories, includ-ing Michigan.

six in the other States and Perritories, including Michigan.
Upon promissory notes legal presumption of payment arises three years after maturity in Arizona, District of Columbia, Maryland, North Carolina, and Wyoming; four in California, Texas, and Utah; five in Arkansas, Florida, Kansas, Louisiana, Nebraska,

Virginia, and Wyoming; seven in Georgia; ten in Illinois, Indiana, Iowa, Missouri, and West Virginia; fifteen in Kentucky and Ohio; and six elsewhere.

Judgments of a court of record are legally presumed to be satisfied after five years in presumed to be satisfied after five years in Arizona, California, Kansas, Nebraska, Ohio, Pennsylvania, Utah, and Wyoming; six years in Colorado, Idaho, Michigan, Montana, Nevaria, Vermont, and Washington; seven in Georgia, Illinois, and Mississippi; ten in Arkansas, Indiana, Iowa. Louisiana, Minnesota, North and South Carolina, Oregon, Tennesse, Virginia, and West Virginia; twelve in the District of Columbia and Maryland; fifteen in Kentucky. New Mexico. and Texas: and Kentucky, New Mexico, and Texas; and twenty in other States, except Connecticut, which does not limit the life of judgments.

#### Interest Laws.

The legal rate of interest is five per cent. in Louisiana; six in Arkansas, Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Mississippi, Missouri, Michigan, New Hampshire, New Jersey, New Mexico, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia; seven in California, Dakota, Georgia, Kansas, Minnesota, Nebraska, South Carolina, and Wisconsin; eight in Ala-bama, Florida, Oregon, and Texas; ten in Arizona, Colorado, Idaho, Montana, Nevada, Utah, and Washington; and twelve in Wy-

oming.

The rate of interest allowed by contract is six per cent in Delaware, Maryland, New Hampshire, New Jersey, New York (any rate on call loans of \$5000 or more, on collateral security), Pennsylvania, Tennessee, and Vermont; eight in Alabama, Georgia, Illinois, Indiana, Kentucky, Louisiana, North Carolina, Ohio, and Virginia; ten in Arkansas, District of Columbia, Iowa, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Oregon, South Carolina, and Wisconsin; twelve in Arizona, Kansas, New Mexico, and Texas; eighteen in Idaho, and any rate in other States and Territation. Idaho, and any rate in other States and Territories, except Connecticut and West Virginia, where only six per cent can be collected by

HANDY INTEREST RULES.—The answer in each case being in cents, separate the two right-hand figures of the answer to express in dollars and cents.

Four per cent.-Multiply the principal by the number of days to run, separate right-hand figure from the product, and divide by nine.

Five per cent.—Multiply by number of days and divide by seventy-two.

Six per cent.-Multiply by number of days, separate right-hand figure and divide by six.
Eight per cent.—Multiply by number of
days and divide by forty-five.
Nine per cent.—Multiply by number of days,

separate right-hand figure and divide by four.
Ten per cent.—Multiply by number of days and divide by thirty five.

Twelve per cent.-Multiply by number of

days, separate right-hand figure, and divide

by three. Women are allowed to vote on school ques-WOMEN are allowed to vote on school questions or officers in Colorado, Dakota, Idaho, Indiana, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New York, New Jersey, Oregon, Vermout, Washington, Wisconsin, and Wyoming; but sometimes, as in Michigan(except Detroit), a property qualification is required. In Arkasas and Mississippi women may vote upon liquor licenses, and in Kansas full municipal authors the secondared was about in sillustration. suffrage is conferred upon them in villages and towns of more than 500 inhabitants. Women also enjoy school and municipal suffrage in the provinces of Ontario and Nova Scotia.

CONSTITUTIONAL prohibition of the liquor traffic began with its adoption by Kanssa in 1880. The next year North Carolina gave but 48,061 votes for it, in a total voting population of 241,208. In 1882 Iowa adopted it by a vote 185,482, a majoritude description of 241,208. of 155,436, a majority of about 30,000. In 1833 Ohio favored it by a vote of 323,189, a majority of 82,214, but it failed of the two-thirds vote required. In 1884 Maine voted it by 70,783, a majority of nearly three to one. In 1885 it majority of nearly three to one. In 1885 is failed in Dakota Territory by a small majority on a very light vote, only 15,570 voting for it. on a very light vote, only 15,570 voting for it. In 1886 the amendment was accepted in Rhode Island by 15,113 to 2930; but it was repealed in 1889 by a larger majority. Michigan in 187, on a very full vote, refused it by 5645 majority; Oregon, by 7859; Tennessee, by about 27,683, and Texas, by 92,661. In 1889 Pennsyvania voted against it by 296,617 to 484,64; Massachusetts, by 86,500 to 134,000; New Hampshire, by 5609 majority, and Virginia, by 35,574. In all the vote has been 1,611,300 to 1,965,785 in 14 States and one Territory, containing 4,414,724 voters.

A sum will double at 4 per cent, simple interest, in 25 years; 4½, 22 years, 61 days; 5. 20 years; 6, 16½ years; 7, 14 years, 14 years, 10 days; 8, 12½ years; 9, 11 years, 40 days; 18, 10 years, 20 days; 4½, 15 years, 278 days; 5, 15 years, 278 days; 6, 14 years, 278 days; 7, 18 years, 278 days; 8, 9 years, 2 days; 7, 18 years, 29 days; 8, 9 years, 2 days.

Weights and Measures.

MEASURES OF WEIGHT.—Avoirdupois: 16 drams equal 1 ounce; 16 ounces, 1 pound; 112 drams equal 1 ounce; 10 ounces, 11 pound; 112 pounds, 11 pounds; 11 pounds; 11 ton. Troy: 24 grains equal 1 pennyweight; 20 pennyweights, 1 ounce; 12 ounces, 1 pound. Apothecaries': 20 grains equal 1 scruple; 3 scruples, 1 dram; 8 drams, 1 ounce; 12 ounces,

Scrupes, 1 train, 1 train, 1 pound.
Suspace on Square Measure.—144 square inches equal 1 square foot; 9 square feet, 1 square yard; 80½ square yards, 1 square rod; 40 square rods, 1 square acre; 640 square acres, 1 square mile.
Measure 205% feet on each side, and you will have a square acre. Very nearly.

have a square acre, very nearly.

MEASURES OF LENGTH.—A palm is 8 inches; a hand (horse measure) is 4 inches; a span is 10% inches; a cubit is 2 feet; a pace is 8 feet; a fathom is 6 feet; a great cubit is 11 feet; 161% feet equal 1 rod; 40 rods, 1 furlong; 8 furlongs, 1 mile; 80 groomsphical miles; 1 desma: 1 mile iest equal 1 rod; 40 rods, 1 turiong; 5 turiong; 5 turiong; 1 mile; 60 geographical miles, 1 degree; 1 mile; 5520 feet, or 1760 yards, in length; a league is 3 miles; a day's journey, 334 miles; a Sabbath day's journey in the Bible, 1155 yards.
Solid or Cubic Measure.—1728 inches equal 1 cubic foot; 27 cubic feet, 1 cubic yard; 40

cubic feet of round timber, 1 ton; 50 cubic feet of hewn timber, 1 ton; 128 cubic feet of wood (4 feet wide, 4 feet high, and 8 feet long), 1

cord; 24.75 cubic feet, 1 perch of stone.

HOUSEHOLD WEIGHTS AND MEASURES.

Wheat flour, 1 pound is 1 quart; Indian meal, 1 pound 2 oz. is 1 quart; butter (soft), 1 pound

castor beans, 46; clover seed, 60; timothy seed, 45; flax seed, 56; hemp seed, 44; millet or Hungarian grass seed, 50; blue grass, red top, or orchard grass seed, 14; osage orange seed, 33; peas, 60; turnips, 58; buckwheat, 48; corn meal, 50; apples, 48; dried apples, 22; dried peaches, 28; dried pluma, 28; cranberries, 40; onions, 54; mineral coal, 52; charcoal, 30; bran, 20; plastering hair, 8; unslacked lime, 70; Michigan salt, 56; coarse salt, 58.

The following are the numbers of English

The following are the numbers of English yards in miles of different nations: Arabian, yards in miles of different nations. Arabaai, 2148; Bohemian, 10,187; Brebant, 6082; Bur-gundy, 6183; Chinese Ills, 628; Dutch, 6285; Danish, 8244; English, United States, 1760; English geographical, 3025; Flemish, 6869; German geographical, 8100; Hamburg, 8244; Han-over, 11,559; Hesse, 10,547; Hungarian, 9113; French (art leagues), 4800; French (marine), 6075; Legal league, 2000 toises, 4293; Irish, 3328; Italian, 2025; Luthenian, 6784; Oldenburg, 10, 820; Persian parasang, 6086; Polish (short), 6085; Polish (Jong), 8101; Portuguese (Jeguos), 6700; Prussian, 8498; ancient Roman, 1613; modern Roman, 2035; Russian verst, 1167; Saxon, 9005; Scotch, 1984; Silesian, 7083; Span-ish (leguas), 4630; Spanish (com), 7416; Swiss, 9166; Swedish, 11,704; Turkey, 1821.

The degrees of heat at which various metals

will fuse are given in the Scientific American as follow. They are indicated in degrees of the centigrade thermometer. Tin. 22.5 to 267; bismuth. 241 to 285; lead, 322 to 334; zinc, 1 pound 2 oz. is 1 quart; butter (soft), 1 pound 2 oz. is 1 quart; 10 pound; 1 pound 2 oz. is 1 quart; 10 pound; 1 pound 2 oz. is 1 quart; 10 pound; 1 p

#### Mental Scales for Housewives.

Eight tablespoonfuls are a gill.

Four saltspoonfuls make a teaspoonful.

Four teaspoonfuls equal one tablespoonful. Ten common-sized eggs weigh one pound. One pint of coffee "A" sugar weighs 12 ounces

Butter the size of an average egg weighs

One quart or five cupfuls of sifted flour, well heaped, one pound.

One pint of best brown sugar weighs 13

One pint, heaped, of granulated sugar, weighs 14 ounces.

Two teacups, well heaped, of coffee "A" sugar weigh one pound.

Two teacups, level, of granulated sugar weigh one pound.

Two teacups of butter, well packed, weigh

ODE OUNCE

One generous pint of liquid, or of finely-chopped meat packed solidly, weighs one pound.

Teaspoons vary in size, and the new ones hold about twice as much as the old-fashioned spoons of thirty years ago. A medium-sized teaspoon contains about a dram,

CAPACITY of boxes, inside dimensions in inches: 8 25 by 8, and 8 deep, a peck; 8 square and 414 deep, a gallon; 7 square and 234 deep, a half-gallon; 4 quare and 4 1-5 deep, a quart: 3 square and 334 deep, a pint; 24 by 17, and 28 deep, a barrel; 18 by 15½, and 8 deep, or 13½ square and 11½ deep, a bushel; 12 by 11½, and 9 deep, or 10 square and 10¾ deep, a half-bushel.

Two teacups of butter, well packed, weigh one pound.

One and one-third pints of powdered sugar weigh one pound.
One tabl-spoonful, well rounded, of soft butter weighs one ounce.
Two tablespoonfuls of powdered sugar or of flour weigh one ounce.
Two tablespoonfuls of powdered sugar or of flour weigh one ounce.
Two and one-half teacups, level, of the best brown sugar weigh one pound.
Two and three-fourths teacups, level, of powdered sugar weigh one pound.
One tablespoonful, well heaped, of granulated, coffee "A," or best brown sugar equals one ounce.

Two tablespoonful, well rounded, of soft soft side in the side of a square acre is 208.71 feet, or 69.57 yards, or 12.649 rods long,—that is, very nearly 208 feet 8½ inches, or 69 yards 1 foot tors of 160, make an acre; or one 5 by 96.

Two and one-half teacups, level, of the best brown sugar weigh one pound.

The side of a square acre is 208.71 feet, or 69.57 yards, or 12.649 rods long,—that is, very nearly 208 feet 8½ inches, or 12 rods 3 yards 1 foot 8½ inches, or 12 rods 3 yards 1 foot 8½ inches, or 12 rods 3 yards 1 foot 8½ inches, or 12 rods 3 yards 1 foot 8½ inches, or 12 rods 3 yards 1 foot 8½ inches, or 12 rods 1 yards, or 12 rods 2 yards, 1 foot 8½ inches, or 12 rods 1 yards, or 12 rods 1 ya

## Facts about Money.

#### THE UNITED STATES.

The legal weights of our coins, in grains, se as follow: Gold—double-eagle, 516; eagle, 258; half-eagle, 129; \$3 piece, 77.4; quarter-eagle, 645; \$1 (new), 25.8. Silver—standard dollar, 412.5; half-dollar, 192.9; quarter-dollar, 96.45; 20-cent piece, 77.16; dime, 38.58; half-dime, 19.2; three-cent piece, 115.2. Minor coins, the older fivedime, 88.8; half-dime, 19.2; three-cent piece, 11.52. Minor coins, the older five-cent piece, 30; two-cents, 96; cent, 48. Our gold and silver coinage has ten per cent of alloy. The five- and three-cent pieces are 75 per cent copper and 25 per cent nickel; the two-and one-cent nices, 95 per cent copper, 5 and one-cent pieces, 95 per cent copper, 5

per cent tin and zinc.
The older "nickel" offers a convenient measure of the metric system, at least as to length and weight. Five of them, laid side by side and touching each other, equal four inches, which is the French decimetre, or 100th of a metre, almost exactly. A single nickel, or the twenty-cent piece, weighs as much as five grams (each 15) g grains), very nearly. Six of either of these coins weigh nearly. Six of either of these coins weigh one ounce, with sufficient nearness to enable anyone to carry his own letter-weights in his pocket. The dime weighs 2½ grams, the half-dollar 12½. In any of our silver coins, except the standard dollar, \$1.20 equal one ounce, or a single letter-rate. Forty dollars in them equal one kilogram (about 2 1-5 pounds); \$4, one hectogram; 40 cents, one decagram.

The die of the Goddess of Liberty upon our coins was devised by Mr. Spencer, inventor of the Spencer lathe. He cut a medallion of Mrs. Washington, an i some of the first issue of coins were struck with her portrait. When Gen. Washington saw them he was much displeased, and demanded that the figure be changed. Mr. Spencer then placed a cap on the head, altered the features a little, and called it the Goddess

of Liberty. The portrait-heads upon the treasury notes issued by the Government are: \$1, Washington; \$2, Jefferson; \$5, Jackson; \$10, Webster; \$20, Hamilton; \$50, Franklin; \$100, Lincoln; \$500, Gen. Mansfield; \$1000, DeWitt Clinton; \$5000, Madison; \$10.000, Jackson On silver certificates—\$1, Mrs. Washington; \$10, Robert Morris; \$20, Commodore Decatur; \$50, Edward Everett; \$100, James Monroe; \$500, Charles Sumner; and \$1000, W. L. Marcy. On gold notes—\$20, Garfield; \$50, Silas Wright; \$100, Thomas H. Benton; \$500, L. Lincoln; \$1000, Alexander Hamilton; \$5000, James Madison; \$10,000, Andrew Jackson. The portrait-heads upon the treasury

#### FOREIGN.

The value of the British pound sterling in the payment of custom-house duties in the United States was fixed by act of Congress at \$4.84. Its value in the old coin of the United States, purer than the present coin, is \$4.44.49—\$40.9, and this is taken as a basis of exchange. Hence, if exchange on London is quoted in New York at 10 per cent premium, a pound sterling is worth \$4.44.49 with 10 per cent added = \$4.84.89. Its exact value in Federal money, as proclaimed \$4 44.9 with 10 per cent added = \$4.88.9. Its exact value in Federal money, as proclaimed by the Secretary of the Treasury Jan. 1, 1887, is \$4.8685. The guinea is 21 shillings, or \$5.12; the sovereign is the gold pound piece; the shilling is worth 24.3 cents; the penny two cents. The crown is a five-shilling piece, worth \$1.21.

The French napoleon, or 20-franc piece, is worth \$3.85; the 5-franc piece, 97 cents:

1 franc, 19.8 cents. So the Belgian and Swiss franc.

The German or the Austrian union crown The German of the Austrian union crown is \$6.64; North German thaler, \$2 cents; double thaler, \$1.44; Austrian or South German florin (gulden), \$3.6 cents; German mark, 23.8 cents; groschen, 2.4. The Netherlands florin (guilder) is 40.2 cents. The Spanish real is 5 cents; peseta, 19.3; duro, \$1; doubloon, \$5.

The Italian lira represents 19.3 cents, the scudo 97.

In Denmark, Sweden, and Norway the crown is 26.8 cents.

Portugal has the milreis for its monetary unit, at \$1.08. The milreis of Brazil is but 54.6 cents.

In Russia, the rouble (100 copecks) equals 54.4 cents.

Turkey has the plastre, at 4.4 cents, Greece, the drachma, 19.8 cents.

Egypt, the pound, \$4,948. India, the rupee, \$2.8 cents. rupees (100,000) is worth \$32,300. China, the tael, \$1.48. A lac of

Japan, the gold yen, 99.7 cents; silver yen, 78.4.

yeu, 70.4. Mexico, the dollar, 74 cents.
Hayti, the gourde, 96.5 cents.
Cuba, the peso, 98.2 cents. The peso of
Chili is 91.2 cents; of the Argentine Republic, 96.5; of the United States of Colombia
(as also the sucre of Ecuador, the sol of
Peru, and the boliviano of Bolivia), 68
cents cents.

The coins of Canada and other British possessions in America have usually the same value as corresponding coins in this country, though banks sometimes discriminate against them.

In all the above cases, where but a single coin is mentioned, it is the monetary unit of the country, from which the values of other coins of the same country may easily be obtained, when their numerical relation to the unit is found. In all cases, except China, the value of the unit in our money is as fixed by the Secretary of the U. S. Treasury,

Jan. 1, 1889.

The letters A, B, C, D, in the corners of national bank and treasury notes indicate the four that are commonly printed at one

the four that are commonly printed at one stroke from a single plate, and are useful in keeping account of the several classes of notes in the Treasury printing office. The very minute capital M upon the neck of the Goddess of Liberty in the standard dollar, just at the last curl of the hair, is a reminiscence of the designer, a man named Morgan, who placed it there at his own in-stance. It is useful sometimes in detecting counterfeits, which are not apt to copy so tiny a feature.

A coin stamped "L" has been presented at a Government office, found too light

from wear or chipping, and returned, thus marked, to the owner.

About 5000 gold dollars are still coined every year by the U.S. mints, for a special

purpose.

The small letters under the eagle upon many of our coins indicate the place where minted, as Philadelphia. New Orleans San Francisco, or Carson City. The mint at minted, as Philadelphis, New Orleans, san Francisco, or Carson City. The mint at Denver is used at present only as an assay office, and there are also Government assay offices at Helena. Mont., Boise City, Idaho, and Charlotte, N. C., besides one in New York City for testing foreign coin or bullion bought by the Government to be coined or regarded. recoined.

#### Rules for Building Barns.

According to The Country Gentleman, these buildings are often erected very much at random, without careful estimate of their needs, and with imperfect knowledge of many useful details. It says that the following twenty brief rules, if observed, would often save money, meet requirements, and afford conwanted in the proposed barn.

Estimate the number of tons of hay to be stored, the loads of unthreshed grain, the required contents of the granary, and the number of cattle and horses to occupy the stables.

3. Calculate the room required for hay at 600 cubic feet on an average for a ton, and nearly the same for the unthreshed grain.

4. Determine granary room by allowing one and a quarter cubic feet to the bushel in

the bins.

5. For cattle and horse-stables, allow for stalls at least three and a half or four feet wide for cattle, five feet for horses, and fourteen feet for entire length, including passage and mangers.

6. Then provide room for hay and grain-bays, space for straw, area of threshing-floor, room for tools and horse-power, size of gran-ary, entire space for cow and horse stables, root-cellar, silo, and manure-sheds.

7. In arranging all these, place the threshing-floor convenient to the grain-bays, and the granary contiguous to or below them; the feed-rooms, roots, meal, or ensilage, on a level with or near the animals; and give heavy products the first place for convenient position.

8. Provide good working space for horse-

forks and hay-carriers

9. Having thus laid the general plan, select if practicable gradually sloping ground for the barn, so as to give ready access to the stables, cellars, etc., below on one side; and to the principal floor above, by a slight embankment on the other side, for ready access of wagons.

 Every barn should be at least a two-ory one. The basement may include cattlestory one. sheep-pens, root-cellar, cistern, water troughs, silo, and area for manure.

11. The next story above may have controlled foor for drawing in crops, tool-rooms, horsestalls, granary, and harness-room, including horse-power.

12. A three-story barn should have an upper bridge or causeway for entrance, and is particularly convenient for unloading hay and grain. It should have at least 20-feet

posts.

Chutes should be provided for throwing down hay from the second or third story to the animals below.

14. All barns should have good eave-troughs, connected with spacious under-

ground cisterns, if water is needed.

The basement walls should stand on small stones or coarse gravel in a broad, deep trench, to effect drainage; and if on wide and heavy flag stones, projecting several inches within the walls, rats will not burrow under them.

A space of a foot between the basement walls and the earth outside, filled with broken stones or coarse gravel, will effect good drainage down to the drain below, and prevent heaving of the walls by frost.

17. Every granary should be graduated inside, so as to show at a glance the number of bushels it may happen to contain at any time. This graduation may be quickly made at any time by multiplying the cubic feet by 45 and

dividing by 56.

18. Petroleum makes inside floors last longer, and gives outside woodwork the char-

acter and durability of cedar.

19. The value of a barn with its surrounding cattle-vards is increased by evergreen screens, which are the most pleasing and the cheapest shelter against winter storms.

20. The cost of barns will vary much with locality, price of lumber, and kill in the builder, but a tolerable approximation may be made beforehand by allowing one dollar for each two square feet of area if the barn is made of rough lumber, with stone-wall basement; and when materials are very cheap, two and a half or three square feet may be two and a half or three square feet may be had for a dollar. For planed lumber and good finish, with paint outside, one half more may be added.

#### Kerosene Lamp Rules.

The annual report of the Fire Marshal in | charred one of our cities prescribes the following:
The portion of the wick which is in the oil

reservoir should be enclosed in a tube of thin sheet metal, open at the bottom, or in a cylinder of fine wire gauze, such as is used in miners' safety lamps (twenty-eight meshes to the square inch).

The oil reservoir should be of metal, rather than of china or glass. It should have no feeding-place or opening, other than that into which the upper part of the lamp is screwed.

Every lamp should have a proper extinguishing apparatus, and a broad and heavy

Wicks should be soft, and not too tightly platted. They should be dried at the fire before being put into the lamps, be only just long enough to reach the bottom of the reservoir, so wide that they quite fill the wick-holder without having to be squeezed into it, and should be soaked in oil before being lit. The reservoir should be quite filled with oil every time before using the lamp.

The lamp should be kept thoroughly clean; all oil should be a refully winds of and all oil should be a refully winds of and all oil should be septial to the should be should be septial to the should be sh

L.

all oil should be carefully wiped off, and all

charred wick and dirt removed before lighting. When it is lit the wick should be first turned down, and then slowly raised.

Lamps which have no extinguishing appar atus should be put out as follows: The wick should be turned down until there is only a small, flickering flame, when a sharp puff or breath should be sent across the top of the chimney, but not down it.

Cans or bottles used for oil should be free from water or dirt, and kept thoroughly closed.

THE greatest artificial height in the world is now the Fiffel tower, completed last year in Paris, 984 feet high. Next come the Washington Monument, in Washington City, Washington Monument, in Washington City, 555 feet; Cologne Cathedral, 521; Rouen Cathedral, 492; Pyramid of Cheops, near Cairo, Egypt, 478; Antwerp Cathedral, 476; Strasburg Cathedral, 465; Pyramid of Cephrenes, near Cairo, 456; Vienna Cathedral, 450; St. Peter's, Rome, 432; St. Martin's Church, Landshut, Germany, 411; Salisbury Cathedral, 400; St. Paul's London, 865. Cathedral, 400; St. Paul's, London, 865.

Interesting Facts about Colors.

Modern appliances and discoveries in the dyer's art have made it possible to produce about 2,000 shades of color, and this number gives but a faint idea of the effects that may be produced by continual admixture of one tint with another. Sax-blues count 20 to 24 shades, produced by manufacturers in printed cottons, linens, and silks, and a still greater variety could be furnished if demanded. In royal blue there are at least 24 to 28 varieties in the middle shades. Scarlet has 30 to 40 shades, and crimson as many while yellow has 40 to 50 variations. These shades and hues were unknown a few years ago, and are only popular now because fashionable. Decided colors, in any material, are now at a discount, and goods to obtain a ready sale must be colored with some variation of an original tint. Popular fancy, however, is no longer satisfied with a simple variation, but colors must be mixed and blended until all former color is lost, and a new hue is produced, that resembles nothing before known.

min an former color is lost, and a new nue is produced, that resembles nothing before known.

Among the fashionable new colors are "desespoir" (French for despair), a new and intense black for mourning goods; "lunar eclipse," a new moonlight gray; "oak trunk," a peculiar cream gray found in new woolens and satin brocades; "lost lamb," a rather dingy gray white; "bear's ear," a reddish brown; "tender sulphur," a pale yellow; "water green;" "Iris," a bluish violet; "empire green," dull, yellowish green; "reed," shade lighter than empire; "dragon," a bluish green; "Esterhazy," a foliage green; "chambre," faint tone of green; "printemps," light lettuce shade; "santelle," faint grass green; "lime or linden," the inner side of the lime leaf shade; "garzon," turf green; "roseau," grayish reed green; "treseda," mignonette; "yert de gris," dark green; "florentine," dark bronze green; "anowball," whitish green; "water of a willow tree leaf; "Nile" pale green, for evening wear; "Lincoln and Robin Hood," positive green; "gww," a deep green; "Chartreuse," yellow green; "water cress," a clear, faint green; "eddish terra-cotta; "bois de rose," rosewood shades: "Francillon," dark old rose; "Aurore," deep pink; "beige rose," dull fawn red; "Sappho," light rosewood shade; "seableuse," purplish red; "vernose," deep, rich shade of red: "azalea," evening shades of pink; "borwnish red; "vernose," deep, rich shade of red: "azalea," evening shades of pink; "burnt rose," bright ashes of rose tint; "shell gray," a pinkish gray, "granite." blue gray; "oxide," dull silver gray; "columbe," dove gray; "heron," whitish gray.

Among the colors that harmonize, orange

Among the colors that harmonize, orange and yellow accord incomparably better than red and orange. Black never produces a bad effect when associated with two luminous colors. Green and blue produce an indifferent effect, but better when the colors are deep. Blue, placed by the side of orange, increases the latter's intensity, and vice versa. Green and violet, especially when light, form a combination preferable to green and blue. Red and blue accord passably, especially if the red incline rather to a scarlet than a crimson. When two colors accord badly, it is always advantageous to separate them by white. While gray never exactly produces a bad effect in its association with two luminous colors, yet in most cases its assortments are dull. Red and yellow accord pretty well, especially if the red be a purple red rather than scarlet, and the yellow rather greenish than orange.

As to the sources of supply for artificial colors, the gorgeous carmine, as well as the crimson, scarlet, carmine, and purple lake, are obtained from cochineal insects. Sepia is the inky fluid discharged by the cuttle-fab to render water opaque for its concealment when attacked. Indian yellow is from the camel. Ivory black and bone-black are made from ivory chips. The exquisite Prussian blue, discovered by a lucky accident, is gut by fusing horses' hoofs and other refuse an mal matter with impure potassium carbonate. In the vegetable kingdom are included the lakes, derived from roots, barks, and gums Blue-black is from the charcoal of the vine stalk. Lampblack is soot from certain resinous substances. From the madder plant, which grows in Hindostan, is manufactured Turkey-red. Gamboge comes from the yellow sap of a tree, which the natives of Siam catch in occoanut shells. Raw and burnt sienna are natural earth from the neighborhood of Sienna, Italy. Raw umber is an earth from Umbria, and is also burned. To these vegetable pigments may probably be added India ink, which is said to be made from burnt camphor. The Chinese, who alone produce it, will not reveal the secret of its composition. Mastic, the base of the varnish so called, is from the gum of the mastic tree, indigenous to the Grecian Archipelago. Bistree is the soot of wood ashes. Of real ultramarine but little is found in the market. It is obtained from the precious lapis lazuli, and commands a fabulous price. Chinese white is zinc, scarlet is ieddine of mercury, and cinnabar, or native vermillon, is from quicksilver ore.

native vermilion, is from quicksilver ore. In the symbolism of colors, white is the token of life, light, religious purity, innocence, faith, joy. In the U. S. flag, it signifies integrity of purpose, in the judge, integrity: in woman, chastity; in the sick, humility. Red indicates love, courage (in the U. S. flag), royalty, fire, heat of the creative power. Some think that illicit love, or licentiousness, is promoted by the prevalence of red in colors. Red and white roses signify love and wisdom. On the malevolent side, red denotes the love of evil, hatred, and other malignant passions. Black is death, mourning, despair, earthiness, wickedness, negation, darkness; blue, heaven, heavenly truth, love, constancy, idelity (in our flag, love, faith, and steadfastness); green, jealousy, also hope, especially of immortality and victory, as the color of the laurel and palm; yellow, the symbol of the sun, God's goodness, marriage, faithfuness, likewise deceit, inconstancy, jealousy; purple, loyalty; violet, love and truth, passion and suffering; and scarlet (also purple), things good and true in celestial origin.

The mourning color under the old Roman republic was black, or dark blue, but under the empire changed to white for women. In Europe and America the color is black, except in Turkey, which has violet. Spain adopted white until 1488. China has still white for a mourning color; Egypt, yellow; and Ethiopis. brown.

To lay off a half-mile driving track, drive two stakes 600 feet apart in a direction to get the best surface. With each stake as its centre, make a circle the diameter of which shall be 452 feet, 5 inches. From the circumference of one let straight lines he made to the other, which lines will be 600 feet long. Thus will be completed the inner line of the track. The outer one should be 18 feet from this for private, and 36 feet for public tracks.

Statistics of Population.

There was formerly much wild work in estimating the population of the world. In 1660 it was guessed, rather than calculated, at an even billion, 144 years before Volney (1804) figured it down to 487,000,000. It was again estimated at 1,000,000,000 in 1769, and not far from the same in 1765, 1778, and 1845. Within the present century estimates have varied from 437,000,000 by Volney and 640,000,000 by Malte-Brun to 1,850,000,000 by Behm in 1866. He and Wagner, German statisticians, are now the greatest authorities on population, and their latest figures (1886) are 1,483,000,000. This gives an average density of population throughout the world of 28.3 persons to each square mile of land area, or 1 to every 23 acres, nearly. The average density in Europe as 83.4 to the square mile, or 1 to about 8 acres; Asia, 49.4 to the mile; Africa, 15.6; North America, 8.8; South America, 4.4; Australasia, 9.1. If the entire earth were populated as densely as Europe now is, it would number 4.309,945,600 souls. Density per square mile in the leading countries is about as follows: Brazil, 4; Mexico, 9; Russia, 10; United States, Brazil, 4; Mexico, 9; Russia, 10; United States, 17 (32 in the settled area); Turkey, 20; Sweden and Norway, 21; Greece, 73; Spain, 90; Portugal, 108; Scotland, 109; China, 110; Denmark, 111; France, 150; Austro-Hungary, 158; Ireland, 169; Switzerland, 175; Germany, 108; Japan, 209; Italy, 237; Holland, 291; England and Wales, 389; Belgium, 520.

The following table exhibits the distribution

The following table exhibits the distribution of population per 1,000, according to age, in the years named, in four of the great coun-

tries:

AGE, Years.	GERMA- NY, 1880.	ENG- LAND, 1871.	France 1872.	U. S. 1880.
0- 5	139	135	· 93	138
5-10	114	119	i 91 i	128
10-15	103	107	87	114
15-20	93	96	84	100
20-25	86	88	88	102
25-30	78	78	72	86
<b>304</b> 0	130	128	139	127
4050	104	100	125	90
5060	80	73	104	60
60-70	53	47	72	36
70-80	21	22	36	15
8090	4	5	7	3.7
Over 90	0.2	0.4	0.4	0.5

The expectation of death at the several ages, as calculated for the life insurance companies, is as follows: At 10 years, 1 in 184; 15, 1 in 181; 20, 1 in 129; 25, 1 in 184; 30, 1 in 119; 35, 1 in 182; 40, 1 in 103; 45, 1 in 190; 50, 1 in 78; 55, 1 in 54; 60, 1 in 85; 65, 1 in 25; 70, 1 in 17. It is calculated that, taking the world as a whole, 67 people die every minute.
Population doubles in the United States, also

in Canada and Australia, every 25 years; in England, every 50 years; Germany, 105 years; French-speaking countries, 140 years.

Fifty-eight per cent of the people of the United States live between the 38th and 43d

parallels, where the continent is widest. In England and Wales in 1881 two-thirds of the population were living in places of 3000 or more inhabitants. Within ten years the population of city districts had grown 19.63 per cent, that of the country but 7.36 per cent. Between 1801 and 1881 the percentage of London people to those of all England and Wales increased from 10.78 to 14.69. In Germany 28. increased from 10.78 to 14.69. In Germany 28 per cent live in towns of 5000 or more; 116 cities of 20,000 inhabitants and over have 16 per cent of the whole. In the United States 18 per cent dwell in 100 such cities. The inhabitants of cities of 2000 or more inhabitants. increased from 10.78 to 14.69. habitants of cities of 8000 or more inhabitants

in this country increased from 3.8 per cent in 1860 to 22.5 in 1890, and they are hardly less than 25 per cent now, or one-fourth of all. The percentage of people living in places of 2,000 or more in recent years has been in Hamburg, 94; in Holland, 80.2; Belgium, 64; England and Wales, 61.2; Iceland, 57.1; Saxony, 56.6; Great Britain and Ireland, 53.1; Switzerland, 14; Prussia, 42; Germany, 41.4; Bavaria, 27.7; Ireland, 19.

The United States, by the last census, had 6,580,793 people of African descent, 105,465 Chinese, 148 Japanese, and 66,407 Indians, besides those untaxed in Indian Territory and, Alaska. In France 93 per cent are French; in Germany, 92 per cent German; in this country increased from 3.3 per cent in

French; in Germany, 92 per cent German; Switzerland, 69 German, 24 French, 5 Italian; Austria, 80 German, 16 Czech or Bohemian, 14 Magyar, 9 Ruthenian, 9 Croat and Servian, 8 Roymanian, 7 Polich, and 7 Slovanian, Arma-Roumanian, 7 Polish, and 7 Slovenian, Armenian, Albanian, Italian, Jew, Zigeuner, Bul-

garian, Greek, etc.
In nearly all European countries female ex-In nearly all European countries female exceeds male population, but in greatly varying ratios—in Scotland 1096 to 1000, Wurtemberg 1071, Sweden 1067, England and Wales 1054, Baden 1052, Bavaria 1049, Switzerland 1046, Ireland 1044, Germany 1039, Norway 1036, Prussia 1033, France 1008; but in Belgium only 995, Italy 999, Greece 933; for Europe at large, 1021. The United States has but 995 females to each 1000 males, in far Western parts many fess, as in Colorado but 504, while in Eastern States there are more than of males, in Massachus-tts 1077 to 1000. males, in Massachus-tts 1077 to 1000.

The average age of living population in England is 26.4 years, in Prussia 27.5, in Sweden 27.66, in Denmark 27.85, in Belgium 28.63, in France 31.06. The average age of the dying is in Sweden 27.66, in Denmark 27.85, in England 29.4, in Belgium 38.35, in France 40.36.

The great mortality among children is & population in Norway; Switzerland, 3.77; England and Wales, 3.44; Sweden, 3.2; Prussia, 2.26; Bavaria, 1.49; Italy, 9. They occur oftener to men than to women, and to adults than to to men than to women, and to adults than to children. Clergymen in England, as generally elsewhere, are long-lived, and their percentage of mortality is represented by 71; lawyers, 02; physicians 6 per cent more than that of all England; country occupations generally, 62 to 89 per cent of all. The probability of death during the first year is .2234; of living through the year, .7716; at 5 years of age, .9945; at 100, 5185. A male child at birth has a probable after-life of 37.2 years; a female child, of 41.7 years.

THE "knot," a measurement of length used by sailors, is not a mile, as is often thought, but 6082% feet, or 802% feet more than a mile, so that 8 knots are equal, very nearly, to 3½ miles.

Statistics of Marriage and Divorce.

The percentage of unmarried people in Ireland, of 16 years and over, is 45 on every hundred of population; in Belgium, 44.9; Switzerland, 44; Fortugal, 43; Germany, 42; Norway and Sweden, 40; France, 33.1; England and Wales, and in Italy, 37.2. Persons over 50 years who have never married are 19.2 of the population of similar age in Paverie 14.4 is years who have never married are 19.2 of the population of similar age in Bavaria, 14.4 in Ireland, 11.5 in Italy, 10.6 in Germany, 10.3 in France, 9.9 in England and Wales, 8.4 in Prussia, and 6.4 in Saxony. In parts of Bavaria the percentage reaches 40. Married persons of 40 to 50 years are 84 per cent of population of such ages in Saxony, 81.9 in Prussia, 80.3 in Germany, 79.2 in England and Wales, 77.6 in France, 76.9 in Italy, 74.5 in Bavaria, and 71.5 in Ireland. in Ireland.

Marriage is understood to have a favorable influence in restraining insanity. In Prussia, out of 100,000 of the insane and as many of the idiotic there were 95 married men and as many married women, against 832 single men and 293 single women, 821 and 256 of the wid-owed, and 1070 and 1030 of the divorced. In the same country in 1880, of 100 blind men 55 were or had been married, and 53 women in 100 blind. Only 8½ per cent. of deaf-mute men and 6 per cent of such women were mar-ried. Of 1000 men married 1867-81, 858.7 had men and 6 per cent of such women were married. Of 1000 men married 1867-81, 853.7 had
been bachelors, 141.4 widowers, and 4.9
divorced; of 1000 women, 906.6 had been
maids, 88.4 widows, and 5 divorced. In England 64 per cent of brides are under 25 years,
in Italy 80 per cent, and in France 58; in England and Wales 53 per cent of bridegrooms,
France 27, and Italy 28. In Prussia 92.8 per
cent of marriages are of persons of identical
religion. Of Protestant bridegrooms 95 per
cent married Protestant wives, 4.7 per cent
Catholics, and a few Jewesses. Of Jewish
bridegrooms 95.2 per cent married Jews, 3.9
per cent Protestants, and 8 per cent Catholics. Of Catholic grooms 88.4 per cent married Catholics, 11.4 per cent Protestants, and
some Jewesses. When both parents are
Catholic the average number of children is
5.21; both Protestant, 4.3; both Jewish, 4.41;
one Protestant, the other Catholic, 3.23; one
Christian, the other Jew, 1.6. Married persons
in Prussia who died 1875-81 had lived together
an average of 22.4 years; when the man died

in Prussia who died 1875-8; had lived together an average of 22.4 years; when the man died first, 23.2; woman first, 21.5. Of marriages broken by death, 562.9 out of 1000 were by death of the man, 487.1 by death of the woman. The annual marriage rate in Europe, per 1000 of population, varied a few years ago from 5.1 in Ireland to 11.3 in Servia. In this country, New York City has the highest marriage rate of any city in the world.—9.42 per 1000. Reports to July 1, 1889, giving this, figure the rate in Germany at 8.85, Holland 8.05, France 7.95, Denmark 7.8, Ireland 7.75, Switzerland 7.65, England 7.6, Italy and Spain 7.55, Belgium 7.2, Austria 7, and Sweden 6.8. During the two decades 1807-86, Connecticut had 96,737 marriages, the District of Columbia During the two decades 1867-86, Connecticut had 96,737 marriages, the District of Columbia 34,065, Massachusetts 206,195, Ohio 544,562, Rhode Island 49,593, Vermont 54,913. The number of divorces granted in the entire United States during the same period was, in 1867, 9937; 1868, 10,150; 1869, 10,939; 1870, 10,962; 1871, 11,586; 1872, 12,390; 1873, 13,156; 1874, 13,969; 1875, 14,212; 1876, 14,800; 1877, 15,687; 1878, 16,080; 1879, 17,083; 1880, 1875, 14,212; 1876, 14,800; 1877, 15,687; 1878, 16,080; 1879, 17,083; 1880, 1963; 1881, 20,762; 1882, 22,112; 1883, 23,198; 1884, 22,994; 1885, 23,472; 1886, 25,535. Total for the 20 years, 228,716, of which 122,121 were in the first decade, 472; 1886, 25,535. Total for the 20 years, 323, the whole, 35,50 these having been 716, of which 122,121 were in the first decade, and 206,595, or 69 per cent more, in the second. In the five years 1872-6 there were nearly 28 per cent more than in the five next prevailing criminal age is between prevailing criminal age is between rearly 28 per cent more than in the five next prevailing criminals age is between remaining the prevailing criminal age is between remaining the p

per cent more. The only States or Territories in which there had been no increase in the last five or ten years are Maine, Vermont, Connecticut, South Carolina, Nevada, and Utah. Illinois granted about one inth of all the divorces in the country, increasing 1867-86 from 1071 to 2600, and Chicago has but little from 1071 to 2600, and Chicago has but little higher a divorce rate than the average of the State. A number of its counties report more divorces in proportion to marriages or population than does that city. In 1867-76 the 14 Northern States east of the Mississippi granted 78,950 divorces, and 110,603 the next ten years, an increase of 40 per cent; these States increased population 1870-80 about 38 per cent, while the increase of divorces between the same years was much more than 40 per cent. Divorces in the old slave States per cent. Divorces in the old slave States and the District of Columbia were 25,129 1867-76 and 55,853 1877-86,—a difference of 122 per cent; but their population was only 20 per cent more in 1880 than in 1870. In the other

cent more in 1880 than in 1870. In the other States and Territories of the West there were in the same periods 18,089 and 40,159 divorces, an increase of nearly 123 per cent; increase of population 1870-80, 89 per cent. Of the 323,716 divorces granted 1867-86, 216,738, or 65 per cent of the whole, were to wives, and 111,983 (35 per cent) to husbands. The cause for which wives were petitioners more largely than husbands are cruelty, in the ratio of 7 to 1; desertion, over 1½ to 1; drunkenness, 9 to 1. The husband is shown to have sought divorce for adultery of wife in 38,155 cases; the wife in 28,480 cases; the wife adultery of hus 88,155 28,480 The Ĭn in husband. for CASES for which most divorces were granted was desertion, being 126,557, or 38 per cent of the whole. Divorces granted for drunkenness, 18,843, cannot fully represent the total in which intemperance is a serious factor. It is only 4 per cent of the total num-ber of divorces, while in a few representative counties, where investigation was carried outside of alleged causes, it is shown that intemperance was a direct or indirect cause in over 20 per cent of the whole number of divorces granted in them.

CHINA is estimated to have 200,000 square miles of coal-fields, North America 193,870, the East Indies 35.500, New South Wales 24,000, Great Britain 9000, Germany 3600, Spain 3500, France 1800, Belgium 900.

CAREFUL statistics show that the average Massachusetts workingman, with a yearly income of \$754, spends 49.8 per cent of it for food, 18 per cent for clothing, 12 for lodging, 5 for fuel, 5.5 for education, etc., 3 for medical attendance, and 3.5 for recreation.

There is a remarkable regularity in the amount of crime in any country year after year. Statistics kept in England from 18% to 1880 show variations of 1.97 crimes annually to every 1,000 of population in 1872-76, to 2.73 in 1857-61. The number of persons yearly sentenced to imprisonment in the same time ranged from 6.54 in the 1,000 in 1857-61, to 7.68 in 1877. In 1879-80, 75 per cent of crime was against reportly without yielders 1.29 we set against property without violence, 18 per cent same with violence, and 5.4 crimes against the person. Habitual offenders, or those who have been punished before, are 40 per cent of the whole, 35.5 of these having been previous punished once and 185 to the time. ly punished once, and 18.5 ten times. The prevailing criminal age is between 30 and 49 years, and there is an average of four male criminals to one female. The married commit less crime than the unmarried, and crim-

#### Curious Statistics.

Careful calculation of the causes of 80,000 fires in the city of London between the years mes in the city of London between the years 1883 and 1885 gave the following percentages: Spontaneous ignition, .95; smoking tobacco, 1.4; matches, 1.41; children playing, 1.59; stoves, 1.67; sparks of fire, 4.47; gas, 7.65; fites, 7.8; curtains, 9.71; candles, 11.07; other known causes, 19.4; unknown, 32.88.

A German mathematician makes the following estimate of the relative value of different members of the human body, as a basis for the award of damages in case of loss by the fault of another, or of pension for loss in

the fault of another, or of pension for loss in war: Both eyes, arms, legs, hands, or feet, 100 per cent; right arm, 60; foot or left hand, 50; right hand, 33½; eye, 23; left thumb or right forefinger, 15; left forefinger, 8; any other finger of left hand, 4. Prof. Fresenius, of Wiesbaden, after long chemical experiment and analysis, finds that an egg contains precisely as much nourish-ment as a pound and an ounce of cherries, a pound and a quarter of grapes, a pound and a half of russet apples, two pounds of gooseberries, or four pounds of pears; and that 114 pounds of grapes, 127 pounds of russet apples, 192 pounds of pears, or 327 pounds of plums are equal in nourishment to 100 pounds of

potatoes.

The following have been widely published The following have been widely published within the last year as the best weights for women at various heights: At 5 feet, 100 pounds; 5 feet 1 inch, 106; 5 feet 2, 113; 5 feet 3, 119; 5 feet 4, 130; 5 feet 5, 183; 5 feet 6, 144; 5 feet 7, 150; 5 feet 8, 155; 5 feet 9, 163; 5 feet 10, 169; 5 feet 11, 176; 6 feet, 180; 6 feet 1, 180. An average of five feet of water falls annually over the whole earth. If condensation that place at an exerge of 500 feet 1, 200 feet 1, 20

take place at an average of 3000 feet above the surface, the force of evaporation to supply such rainfall equals the lifting of 161,000 tons of water 3000 feet every minute, or 300 billions of horse-power constantly exerted.

of horse-power constantly exerted.

The chances of matrimony for women at various ages have been figured as follow:
Between 15 and 20 years of age, 14½ per cent;
20 and 25, 52; 25 and 30, 18; 30 and 35, 15½;
35 and 40, 33½; 40 and 45, 2½; 45 and 50, 9½; 50 and 56, ½4; after 60, one-tenth of 1 per cent, or 1 in 1000. In France the chances, based upon 110 1000. In France the chances, based upon 876 cases of married women, are: At 13 years, 3; 14, 11; 15, 16; 16, 43; 17, 45; 18, 77; 19, 115; 20, 118; 21, 86; 22, 85; 23, 59; 24, 53; 25, 36; 24, 27, 28; 28, 22; 29, 17; 30, 9; 81, 8; 32, 5; 33, 7; 34, 5; 33, 3; 36, 38, and 40, 0; 37, 2; 39, 1. The measurement of a large number of

Roman coffins shows that the average height of the ancient Romans could hardly have exceeded 5 feet 5 inches. Twenty five mummies the average male Egyptian to have been but 5 feet 1 inch; female, 4 feet 7 inches. The most ancient mummy of a being yet found measures but 4 feet 4 inches; Cleopatra's mummy, 4 feet 6, about the height of most European or American girls of 13 years.

Saxony has now the greatest proportion of suicides of any European country,—in 1887, 391 in a million inhabitants, against 174 in 1849. France had 7572 last year, 2168 of them attributed to mental afflictions, 1228 to physical suffering; 975, domestic troubles; 800, drunkenness; 483, poverty; 305, pecuniary difficulties; 202, the desire to avoid imprisonment; 100, loss of employment; 89, fear of expo-ure; 56, loss of relatives; 25, dread of military service, and 227 to jealousy and crossing in love. Four men commit suicide to one woman, except in Japan and India, where the ratio is two women to one man. About 10 married two women to one man. About 10 married women to 9 or 9.4 of single women are among the suicides. Out of 1,000,000 people, 205 married men with children committed suicide; without children, 170; widowers with children, 525; without, 1004; married women with children, 45; without, 188; widows with children, 104; without, 238. It thus appears that when marriage is childless the number of suicides is doubled in men and trebled with women; and that maternal love diminishes suicides among widows with children by one-third over those of childless unions.

Inquiries made of 406 persons at the University of Dorpat, Prussia, show that women need to sleep longer than men, and that the percentages of those tired and not tired morning and evening is 3 to 2 and 2 to 3, as compared with men. The time needed for falling asleep was 20.8 minutes for men generally; 17.1 for students; 21.2 for women. Of students, 80 per cent had unbroken sleep during the night; other men, 70 per cent; women, only 48. Of men in general 28 per cent, students 19, and women 20, sleep also in the afterdents 19, and women 20, sleep also in the afternoon. Of women, 63 per cent sleep lightly; students, 42; other men, 44. The period of maximum dreaming for all is 20 to 24 years of age. Of women 73 per cent dream nightly, or frequently; students, 50; other males, 48. Of all who dream every night, 62.5 per cent dream vividly; of those who dream frequently, 60.5; of those who dream seldom, only 28.8. Of students dreaming nightly, 68 per cent sleep lightly and 28.8 soundly; of those dreaming frequently, 40 per cent sleep lightly; dreaming seldom, 32.8. Corresponding percentages, omitting the second, for other men are 68.8, 42.1, and 39.3; for women, 72, 46, and 50. Over 36,000,000 bables are born into the world every year. If ranged in lines of

over output and the world seven times. If all become adults, and are about equally divided in sex, they would supply a force 100 times as large as the entire British standing army with a wife for every soldier. A procession of them carried in single file at the rate of twenty a minute, night and day, would consume nearly seven years in passing a given point, and they would then be no longer bables.

The Sandwich Island alphabet has only 12 letters; Burmese, 19; Italian, 20; Bengalese, 21; Hebrew, Syriac, Chaldee, and Samaritan, 22 each; French, 23; Greek, 24; Latin, 25; German and Dutch, 26 each; Spanish and Slavonic, 27 each; Arabic, 28; Persian and Coptic, each 32; Georgian, 35; Armenian, 38; Russian, 41; Muscovite, 43; Sanscrit and Japanese Stantenee: Ethiopie and Tarteria each 2009. ese, 50 apiece; Ethiopic and Tartaric, each 202.

ese, 50 apiece; Etniopic and Tartaric, each ave.
Annual deaths by lightning in England are
something less than 1 in 1,000,000 of population; in France, not quite 2; in Prussia, nearly
4, and in Russia and Switzerland, over 5. Of
those thus killed in England, 81 per cent are
males out 19 near each formeles.

males, only 19 per cent females.

Army health statistics at the Surgeon-General's office in Washington are prepared in part by electricity. Facts in individual records are punched from uniformly printed recording-cards, and the tabulation of these cards is entirely mechanical and electrical. They are run through a press, by which the resulting electrical connection through punched holes is recorded upon a series of counters arranged to register to 10,000. Any desirable or possible combinations of dates destrable or possible combinations of destrictions recorded upon the cards may be electrically tabulated. It is proposed to employ this machine this year upon the statistics of the eleventh census.

THE largest piece of amber known was dug up last year at Altona, Prussia. It weighed 850 grammes.

#### Sunday-school Statistics.

The following report of Sunday-schools in the United States and Canada was made to the World's S. S. Convention in London last July:

United States.	Schools	Scholars.	Teachers.
Alabama	3,048	158,126	19,301
Alaska	14	1,100	52
Arizona	82	1,369	222
Arkansas	1,712	94,305	11,965
California	803	71,687	7,863
Colorado	893	25,217	3,088
Connecticut	1,071	142,346	18,854
Dakota	801	80,848	5,623
Delaware	217	22,706	2,918
Dist. of Columbia	177	84,968	3,842
Florida	608	26,676	4.048
Georgia	5,454	298,187	81,749
Idaho	48	8,228	396
Illinois	6,849	574,822	76,202
Indian Territory.	222	8,586	1,098
Indiana	4,951	371,382	48,924
Ion a	5,112	319,128	48,295
Kansas	3,544	214,422	82,182
Kentucky	2,647	225,801	81,606
Louisiana	522	32,617	4,181
Maine	1,325	92,7:0	11,625
Maryland	2,390	253,063	81,021
Massachusetts	1,790	237.593	<b>83</b> .923
Michigan	3,300	264,000	<b>36,0</b> °0
Minnesota	1.323	100,320	12.821
Mississippi	1,614	84.677	11,767
Missouri	8,955	.280,922	87,284
Montana	80	4210	4.0
Nebraska	2,151	118,505	19,450
Nevada	80	2.060	812
New Hampshire.	519	49,335	6,640
New Jersey	1,996	246,26	82.634
New Mexico	45	1,845	225
New York	7,198	979,415	108,272
North Carolina	4,197	197,937	88,576
Ohio	6,753	619,499	88,332
Oregon	290	20,749	2,531
Pennsylvania	8,729	964,599	128.484
Rhode Island	300	44,570	5,430 18,054
South Carolina	1,667	103,815	34,560
Tennessee	8,840	249,600 190,625	23,161
Texas	8,097 98	6,741	554
Utah	609	53,473	7,308
Vermont	3.652	277,781	42,678
Virginia	129	6,950	921
Washington West Virginia	1,888	120.811	19,212
Wisconsin	1,610	114.869	15,211
Wyoming	54	2,424	274
			I
Totals	101,824	8,345,431	1,100.104

CANADA.	Schools	Scholars.	Teachers.
Ontario	3,961	320,613	37,867
Quebec	676	36,183	4.137
Nova Scotia	804	55,487	6,195
New Brunswick.	845	40,028	5,143
Prince Ed. Island	189	9,554	1,051
Manitoba	150	5,000	600
British Columbia	11	427	57
Totals	6,636	467,292	55,050

A BRIGHT Massachusetts worker has devised A BRIGHT MASSACHUSEUS WORKET HAS GEVISSED an excellent book-mark to promote systematic study of the lessons. He has the following neatly printed in blue ink, with ornamental border, upon a strip of cardboard six inches long by one and seven-eighths wide:

SUNDAY-SCHOOL SCHOLARS' BOOK-MARK.

#### PLAN OF STUDY.

Monday.-Read the next Sunday's lesson. TUESDAY.—Repeat lesson in your own words. WEDNESDAY.—Find Bible passages to illustrate the lesson.

THURSDAY.- Explain the words of the lesson. FRIDAY.—Sum up the facts and thoughts in the lesson.

SATURDAY .- State the truths taught in the lesson.

SUNDAY.—Apply the golden text to the les-

THE Old and New Testament Student gives the following excellent "Memory Formula for the Holy Land": Take for base-line Jordan between the two seas, a north and-south line of 60 miles West from its head is Nazareth; from its middle point, Samaria; from its foot, Jerusalem. West from middle of Dead Sea Jerusalem. West from middle of Dead sea is Hebron. From Hebron to Jerusalem, north, Samaria to Nazareth, 30; Nazareth to Dan, 40; Dan back to Beersheba, 150. From Dan west to Mediterranean (near Tyre), 25 miles; Jordan through Nazareth west to sea, 35 miles; Jordan through Samaria to sea, 45 miles; Jordan through Jerusalem to sea, 55 miles; middle of Dead Sea through Hebron to Mediterranean, 65 miles. Add. if desired, that from Dan south to Mt. Hor, or from Beersheba to Sinai, is 25 miles, and that area of Palestine proper about 6000, very near that of New Hampshire. which it also somewhat resembles in shap The distances given are very close to the exact survey measurements, varying at the utmo less than two miles.

#### The International Sunday-school Lessons for 1890.

The International Lesson Committee announces lessons for 1890, twelve months in Luke; 1891, nine months in the Old Testament, three months in John; 1892, six months each in John's Gospel and other New Testament writings, and in the Old Testament and nine three months in the Old Testament and nine in the Acts and Epistles.

The lessons for 1890 are the following:

Jan. 5-The forerunner announced. Luke 1: 5-17. Jan. 12—The Messiah announced. Luke 1:

26-35. Jan. 19-The song of Zacharias. Luke 1:

Jan. 26-Joy over the child Jesus. Luke 2:

Feb. 2-Jesus brought into the temple. Luke 2:25-85.

Feb. 9-Childhood and youth of Jesus. Luke 2:40-52 Luke \$

Feb. 16-The ministry of John. 7.99 Feb. 23—The temptation of Jesus. Luke

1-18.

March 2—Jesus at Nazareth. Luke 4:16-5 March 9 – The great physicien. Luke 4:33-4 March 16—The draught of fishes. Luke

March 23—Christ forgiving sin. Luke 5:174
March 30—Review, or temperance (Gal. 6:10) or missionary (Psa. 72:1-20) lesson.
April 6—Christ's law of love. Luke 6:274
April 18—The widow of Nain. Luke 7:111
bril 90—Econyopes

April 20—Forgiveness and love, 86-50.

April 27—The parable of the sower. 8:4-15.

May 4-The ruler's daughter. Luke 8:41, 42, 49-56.
May 11—Feeding the multitude. Luke 9:

10-17.

May 18—The transfiguration. Luke 9:28-36. May 25—The mission of the seventy. Luke 10:1-16.

June 1—The good Samaritan. Luke 10:25 87. June 8—Teaching to pray. Luke 11:1-18. June 15—The rich man's folly. Luke 12:13-21. June 22—Trust in our Heavenly Father. Luke 12:22-34.

June 29—Review, or temperance (Dan. 1:8-17) or missionary (Isa. 55:8-18) lesson. July 6—Lowful work on the Sabbath. Luke

13:10-17.

July 13—The great supper. Luke 14:15-24 July 20—Taking up the cross. Luke 14:25-85. July 27—Lest and found. Luke 15:1-10. Aug. 3—The prodigal son. Luke 15:11-24.

Aug. 10-The rich man and Lazarus. Luke 16:19-31.

Aug. 17—The ten lepers. Luke 17:11-19. Aug. 24—Prevailing prayer. Luke 18:1-14. Aug. 81—Entering the kingdom. Luke 18:

15-30.

Sept. 7-Jesus and Zacchæus the publican. Luke 19:1-10.

Sept. 14—Parable of the pounds. Luke 19: 11-27.

Sept. 21—Jesus entering Jerusalem. Luke 19:37-48.

Sept. 28—Review, or temperance (Dan. 5:1-6) or missionary (Luke 21:1-4) lesson.
Oct. 5—Parable of the vineyard. Luke 20:

9-19.

Oct. 12—The Lord's supper. Luke 22:7-20. Oct. 19—The spirit of true service. Luke 22:24 37.

Oct. 28 –Jesus in Gethsemane. Luke 22:39 53. Nov. 2-Jesus accused. Luke 22:54-71. Nov. 9--Jesus before Pilate and Herod. Luke

23:1-12.

Nov. 16—Jesus condemned. Luke 23:13-25. Nov. 23—Jesus crucified. Luke 23:33-47. Nov. 30—Jesus risen. Luke 24:1-12.

Dec. 7—The walk to Emmaus. Luke 24:13-27.
Dec. 14—Jesus made known. Luke 24:28-43.
Dec. 21—Jesus's parting words. Luke 24:

44.53. Drc. 28-Review, or other lesson selected by the school.

## A New Page about the Bible.

One of the most useful little manuals issued of late years is "Keys to the Word, or Helps to Bible Study," by the Rev. A. T. Pierson, D. D., of Philadelphia, formerly pastor of the Fort-street Presbyterian Church Detroit. It is published by A D. F. Randolph & Co., of New York City, by whose courtesy we are allowed to prepare from it the following invaluable table:

Books. KEY-WORD. KEY-VERSE. Genesis. Beginning. i. 1. xii. 23, Exodus, Passover. Leviticus. Atonement. xvi. 84. xxxiii. 1. Numbers. Sojourn, x. 12, 18. i. 8. xxi. 25. Deuteronomy. Ob- ience. Joshua. Possession. Anarchy. Judges. Ruth. Kinsman (Redeemer). iv. 14. 1 Sam. x. 25. 1 Kgs. ii. 12; J. II. Samuel. Kingdom. I. II. Kings. Royalty. xi. 18. 2 Chr. xv. 2. Ez. i. 5; Neh. I. II. Chronicles. Theocracy. Ezra. Restoration. Nehemiah. íi. 5. Esther. Providence. iv. .14. Job. i. 0. Trial. xxix. 2. Psalme. Worship. Proverbs. Wisdom. ix 10. Ecclesiastes. Vanity. Song of Solomon. Beloved. ii. 11. vi. 3.

Salvation.

lsaiah

Jeremiah. Lamentations.

Ezekiel.

Daniel.

Hosea.

Joel.

Amos

Jonah.

Micah.

Nahum

Haggai.

Malachi.

Kark.

Luke.

John.

Acts. Romans

Matthew.

Habakkuk.

Zephaniah.

Zechariah.

Obadiah.

Warning. vii. 28; xlvi. 1. ii. 11. Destruction. Visions. i. 1. Revealed Secret. ii. 22. Return. xiv. 9. ii. 13. Judgment. Punishment. iv. 12. Edom. 21. Overthrow. iii. 2.

liii. 5.

vi 2 Controversy. 1. 8, 9. Full end. Paith. ii. 4. Remnant. i. 4; iii. 18. Build. i. 8.

Jealousy. viii. 2. Robb rv. iii. R Kingdom. xxvii. 37. Service. x. 45. xix. 10. Son of Man.

Life. xx. 31. Witness. i. 8. Righteousness. i. 17.

BOOKS. KEY-WORD. KEY-VERSE. ii. 7, 8. vii. 6, 7. Wisdom. I. C rinthians. II. Corinthians. Comfort. Galatians. Faith. iii. 11. Ephe-ians. Philippians. i. 3. In Christ one. Gain. iii. 7, 14; iv. 4. In Christ com-Colossians. plete.
I. II. Thessaloni- Waiting. ii. 10. 1 Th. i. 10; 2 Th. iii. 5. ans I. II. Timothy. 1 Tim. iii. Doctrine. 2 Tim. i. 13.

Titus. Profitable. iii. 8, 9. Philemon. Receive. 17. xi. 40. ii. 26. Better. Hebrews. Works. James I. II. Peter. Precious. 1 Pet. ii. 7. J. John. Fellowship. Walk (in truth). v. 13. II. John. 6. III. John. Fellow-helper

8. 21, 24. i. 1. (to the truth). Kept. Jude. Revelation. Revelation.

There is no date from beginning to end in the Bible. It comprises sixty-six books, suppos d to have been written by about forty men. Fifty-four miracles are recorded in the Old, and fifty-one in the New Testament; total, 105. There is a verse in the New Testament as short as John xi 85, "Jesus wept," in point of words, but not in letters. Thessalonians v. 16, "Rejoice evermore." There are two chapters in the Bible almost alike word for word, 2 Kings xix. and Isaiah xxxvii., and one book, Eather, in which God is not mentioned. The order in which the four epistles follow The order in which the four consists and Corinthians may be easily recalled from the order of the vowels,—Galatians, Ephesians, Philippians, Colossians,—a, e, i, o, Similarly order of the vowels,—ialanians, ephesnans, Philippians, Colossians.—a, e, i, o. Similarly the epistles not Pauline, after Hebrews.—James, Peter, John, Jude; and the double Old Testament historical books.—Samuel, Kings. Chronicles. The number of letters in Old Testament or New Testament is 3 and of the part of the property of the part of the property of the propert 9. These digits placed side by side (39) represent the number of books in the Old Testament, and the multiplication of the same gives the number in the New Testament, -27: in all two 6's, 66.

BEES OF THE BIBLE. Be courteous. Be strong in the Lord Be clot' ed with humility.

Be not weary in well doing.

Libraries, Books, and Reading.

The oldest libraries in the world are undoubtedly those uncovered by the recent explorations in the Orient, and consist of baked clay tablets, inscribed with characters that are readily deciphered and translated by the scholars. Pisistratus is related by doubtful tradition to have founded a library in Athens tradition to have founded a library in Athens about 587 B. C., and Aristotle is said to have bequeathed a library to Theophrastus 322 B. C., which was finally taken to Rome.

The great libraries of the world are the National, in Paris; the British Museum, London

various, in raris; the British Museum, London; the Imperials, St. Petersburg and Vienna; the Royal, one each at Berlin, Dresden, Munich, and Copenhagen; Bodleian, Oxford, and University, Leipsic. Books and pamphlets in each of the first two number not far from two millions.

The great American Library is the Congressional, with about 700,000 volumes. A gressional, with about 700,000 volumes. A superb Government building is erecting for it. The Boston Public Library has about 400,000; Harvard University, 365,000; Yale College, 200,000; Astor, New York, 190,000; Cornell University, 170,000; Mercantile, Philadelphia, 185,000; Philadelphia Public, 115,000; Detroit Public, over 90,000.

The ranid rate at which within a control of the public over 90,000.

The rapid rate at which public or private The rapid rate at which public or private libraries may increase alone, by the addition of new books in the English language, is indicated by the immense publication of such issues in this country and England. In the year 1888 there were printed in England 929 books of fiction; in the United States, 808; of theology, 748 and 339; history, 877 and 110; biography, 102 and 145; poetry, 115 and 165; education, 690 and 306; law, 115 and 329; fine art. 184 and 148, and invenile, 112 and 288—in art, 181 and 143, and juvenile, 112 and 298—in all 3372 and 2643, or a grand total of 6015 in only these two countries, or nearly 20 every secular day and two every working hour, to say nothing of pamphlets, books in other departments of literature, and books privately published.

published.

The vast majority of readers from a public library, or from their own purchases or those of their friends, still peruse works of fiction. At the Newark Public Library, by the last returns at hand, the percentage of novels issued actually reached 87.2; at the Omaha Public, 84.6; Lowell Public, 76.8; Enoch Pratt Free Library, Baltimore, 76.6; St. Paul Public, 75; Peabody Institute, Baltimore, 73.7; Mercantile, New York, 72.9; Boston Public, 70; Malden, Mass., 68; Lynn, 67.5; Hartford, 67.25; New York Free, 67; San Francisco Mercantile, 66.6; Detroit, 66.3; and so down to the Cooper Union, of New York, which reports but 33.7.

The New York Free Circulating Library has four branches in different parts of the city, is

four branches in different parts of the city, is patronized largely by working people, and circulates annually 150,000 volumes.

In fiction the book most called for in 1887 was "Uncle Tom's Cabin"; the next year, "Ben Hur"; next to that the greatest demand is for "Monte Cristo." The circulademand is for "Monte Cristo." The circulation of complete editions and separate plays of Shakspere is, however, usually as large as any work of fiction. Of separate plays the "Merchant of Venice." "Romeo and Juliet." and "Richard III" are the most popular. The works of Charles Dickens are in great demand, "Pickwick" heading the list, while "Oliver Twist" and "David Copperfield " are great favorites. Jules Verne's "Mysterious Island" and "Twenty Thousand Leagues Under the Sea" usually come next. Other novel-writers mostly in demand are Thackeray, Scott, Mrs. Craik, Sue ("The Wandering Jew"), Charlotte Bronte, Black, Mrs. Holmes, Hawthorne, Samuel Lover, Ebers, Charles Reade, Wilkie Collins, Marryatt, and

Bulwer. "Robert Elsmere" was constantly called for in its time, but "Ben Hur" promises called for in its time, but "Ben Hur" promises more enduring popularity. In Mr. Joseph Cook's judgment, the six novels most to be recommended are Richter's "Titan," Goethe, "Wilhelm Meister," "Hugo's "Les Miserables," Mrs. Stowe's "Uncle Tom's Cabin," George Ellot's "Romola," and one of Dickens's, to be selected by the reader. Mr. Gladstone holds that in considering the value of novels the proper test is "Which will best been weather. that in considering the value of novels the proper test is, "Which will best bear reading and re-reading?" He agrees with Wilkie Collins in thinking Scott the first novelist of the century, with the "Bride of Lammermoor" his favorite, which he reads every three or four years. George Eliot, he thinks, comes next, and her masterpiece "Silas Marner." Professor Beers, of Yale College, prescribes the following \$15 library for students in

Professor Beers, of Yale College, prescribes the following \$15 library for students in English literature: Stopford Brooke's "Primer," Taine's "History of English Literature," Saintsbury's "Elizabethan Literature," Mrs. Oliphant's "Literary History of England in the Eighteenth and Beginning of the Nineteenth Century," Morley's "First Sketch of English Literature," "Stedman's Victorian Poets," and Ward's "English Poets"

Poets.

Poets."

The best ten books for children's reading have been approved by good authorities as follow: "Little Women," "Little Lord Fauntleroy," "David Copperfield," "Pilgrim's Progress," "Scottish Chiefs." "Andersen's Fairy Tales," "Robinson Crusce," "Tales from Shakspere," "Arabian Nights," "Water Babies." Some would substitute Grimm's "Household Stories" for "Connerfield" and "Household Stories" for "Copperfield," and for "Tales from Shakspere" prescribe "Alice in Wonderland," "Fairyland Tales," or Hauff's "Tales."

The most curious book in the world is neither written nor printed. Every letter of the text is cut into the leaf, and as alternate the text is cut into the lear, and as alternate leaves are of blue paper it is as easily read as the best print. The labor required and the patience necessary to cut each leaf are difficult to imagine, yet the work is as perfect as though done by machinery, though every character was made by hand. The book is entitled "The Passion of Christ," and is in a Presch museum.

French museum.

The highest priced book ever sold brough The highest priced book ever sold brough \$50,000, a vellum missal presented to Henr VIII by Pope Leo X. It was accompanied by a document making King Henry "defende of the faith." It is now in possession of the German Government. There is a Hebrer Bible in the Vatican for which the Jews of Vienna once offered its weight in gold. The offer was declined. It consists of a vast roll of the variety of the consists of a vast roll of the manuscript requiring two men to carry, and the offer would have mounted up to about \$100,000, the largest ever made for one book

How the boy Macaulay read: "When a bo I began to read very earnestly, but at the for of every page I read I stopped and oblige myself to give an account of what I had rea on that page. At first I had to read it three or four times before I got my mind firmh fixed. But I compelled myself to comply with the plan, until now after I have read a bod through once I can almost recite it from the beginning to the end.

Mr. Walter Besant uses the following rule in writing: Practice writing something original every day; cultivate the habit of c servation; work regularly at certain hour read no rubbish; aim at the formation is style; endeavor to be dramatic; avoid is sin of writing about a character.

Much-sought Speeches and Quotations.

PRESIDENT LINCOLN'S SPEECH AT GETTYSBURG. Four score and seven years ago our fathers brought forth upon this continent a new nation, conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field as a great resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But in a larger sense we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here, have consecrated it far above our power to add or detract. The world will little note, nor long remember, what we say here; but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us; that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion; that we here highly resolve that these dead shall not have died in vain; that this nation, under God, shall have a new birth of freedom; and that government of the people, for the people and by the people, shall not perish from the earth.

We owe it, therefore, to candor, and to the amicable relations existing between the United States and those powers, to declare that we should consider an attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. \* It is impossible that the allied powers should extend their political system to any portion of either continent (North or South America) without endangering our peace and happiness.—From the Annual Message of 1833.

DougLas don't care whether slavery is voted up or down; but God does care, and humanity cares, and I care; and with God's help I shall not fail. I may not see the end; but it will come, and I shall be vindicated; and these men will find that they have not read their Bibles right.—Abraham Lincoln.

SENATOR CHANDLER'S JEFF DAVIS SPEECH [March 2, 1879, eight days after Mr. Chandler had resumed his seat in the United States Senate, an amendment was offered to a pending appropriation bill, excluding Jefferson Davis from its benefits as an officer in the Mexican War, or from the benefits of any pension bill. For some hours, says the Post and Tribune biography, the Senate Chamber rang with fervent eulogies upon the archrebel of the South. W. E. Chandler of New Hampshire, now himself Senator, was looking on from the reporters' gallery, and finally said to Senator Rollins of his State, "Tell Zach Chandler that he is the man to call Jeff Davis a traitor." In response to this suggestion, as Senator Morgan of Alabama closed another eulogy, Mr. Chandler rose and said:]

MR. PRESIDENT: Twenty-two years ago tomorrow, in the old Hall of the Senate, now occupied by the Supreme Court of the United States, I in company with Jefferson Pavis

MR. PRESIDENT: Twenty-two years ago tomorrow, in the old Hall of the Senate, now occupied by the Supreme Court of the United States, I, in company with Jefferson Davis, stood up and swore before Almighty God that I would support the Constitution of the United States. Mr. Jefferson Davis came from the Cabinet of Franklin Pierce into the Senate of the United States, and took the oath with me to be faithful to this Government. During four years I sat in this body with Mr. Jefferson Davis, and saw the preparations going on from day to day for the overthrow of this Government. With treason in his head and perjury upon his lips he took the oath to sustain the Government that he meant to overthrow.

Sir, there was method in that madness. He, in co-operation with other men from his section and in the Cabinet of Mr. Buchanan, made careful preparation for the event that was to follow. Your armies were scattered all over this broad land, where they could not be used in an emerg ncy; your fleets were scattered wherever the winds blew and water could be found to float them, where they could not be used to put down rebellion; your treastry was depleted until your bonds, bearing six per cent, principal and interest payable in coin, were sold for eighty-eight cents on the dollar, and no buyers. Preparations were carefully made. Your arms were sold, under an apparently innocent clause in an army bill providing that the Secretary of War might, at his discretion, sell such arms as he deemed it for the interest of the Government to sell.

Sir, eighteen years ago last month I sat in these halls and listened to Jefferson Davis delivering his farewell address, informing us what our constitutional duties to this Governwhat our constitutional duties of this Government were, and then he left and entered into the Rebellion to overthrow the Government that he had sworn to support! I remained here, sir, during the whole of that terrible Rebellion. I saw our brave soldiers by thousands and hundreds of thousands,—aye, I might say millions-pass through to the theater of war, and I saw their shattered ranks return. I saw steamboat after steamboat, return, I saw steamnoat atter steamnoau, and railroad train after railroad train, arrive with the maimed and the wounded. I was with my friend from Rhode Island [General, afterwards Senator, Burnside] when he com-manded the Army of the Potomac, and saw piles of legs and arms that made humanity shudder. I saw the widow and the orphan in their homes, and heard the weeping and wailtheir nomes, and neard the weeping and wanting of those who had lost their dearest and their best. Mr. President, I little thought at that time that I should live to hear in the Senate of the United States eulogies upon Jefferson Davis, living,—a living rebel eulogized on the floor of the Senate of the United States! Sir, I am amazed to hear it; and I can tell the gentlemen on the other side that they little know the spirit of the North when they come here at this day and with bravado on their lips utter eulogies upon a man whom every man, woman, and child in the North believes to have been a double-dyed traitor to his Government.

#### MACAULAY'S PROPHECY.

[March.23, 1857. Macaulay wrote a letter to Mr. H. S. Randall of New York, author of a Life of Jefferson, a copy of which had been sent to Macaulay, in which letter occurs the following remarkable passage:]

I have long been convinced that institutions

I have long been convinced that institutions purely democratic must sooner or later destroy liberty or civilization, or both. . . I heartily wish you a good deliverance. But my reason and my wishes are at war, and I can not help foreboding the worst. It is quite plain that your Government will never be able to restrain a distressed and discontented majority. For with you the majority is the Government, and has the rich, who are always a minority, absolutely at its mercy. The day will come when in the State of New York a multitude of people, none of whom has had more than

half a breakfast, or expects to have more than half a dinner, will choose a legislature. Is t possible to doubt what sort of a legislature will be chosen? On one side is a statesman preaching patience, respect for vested rights, strict observance of public faith. On the other is a demagogue ranting about the tyranny of capitalists and u-urers, and asking why anybody should be permitted to drink champagne and to ride in a carriage, while thousands of honest folk are in want of necessaries. Which of the two candidates is likely to be preferred by a workingman who hears his children cry for more bread? I seriously apprehend that you will, in some such season of adversity as I have described, do things which will prevent prosperity from returning; that you will act like people who should in a season of scarcity devour all the seed-corn,

and thus make the next a year not of scarcity, but of absolute famine. There will be, I tear, spoliation. The spoliation will increase the distress. The distress will produce fresh spoliation. There is nothing to stop you. Your Constitution is all sail and no anchor. As I said before, when a society has entered on this downward progress, either civilization or liberty must perish. Either some Cæsar or Napoleon will seize the reins of government with a strong hand, or your republic will be as fearfully plundered and laid waste by barbarians in the twentieth century as the koman Empire was in the fifth; with this difference, that the Huns and Vandals who ravaged the Roman Empire came from without, and that your Huns and Vandals will have been engendered within your own country by your own institutions.

# Personal Notes.

Rulers of Europe: Victoria, Queen of Great Britain and Ireland, and Empress of India, 71 years old next May, rulling since 1838. William II., Emperor of Germany and King of Prussia, — years old. German potentates also include the King of Bavaria, the King of Saxony, the King of Wurtemburg, and the Grand Duke of Baden. Alexander III., Emperor of Russia, 44 years old, reigning eight years since the assassination of his father. Alexander II. Francis Joseph, Emperor of Austria and King of Hungary. 59 years old, and wearer of the crown 41 years. Humberto I., King of Italy, 45 years old, reigning 11 years, second of the kings of united Italy. Abdul Hamid II., Sultan of Turkey, 46 years old, sovereign 18 years, and 28th sultan since the fall of Constantinople. Georgies (George) I., King of Greece (or of the Hellenes), son of the King of Penmark, 44 years old, ruling 26 years. William III., King of the Netherlands, aged 72 and the oldest monarch in Europe, over 40 years on the throne. Leopold II., King of Peiglium, 54, 24 years king. Alphonse XIII., King of Spain, 2 years old, reigning by bis mother. Queen-regent. Carlos I., King of Portugal, lately acceded. Oscar II., King of Portugal, lately acceded. Oscar II., King of Sweden and Norway, 60, 17 years king. Christian IX., King of Denmark, 71, second oldest in Europe, father of the King of Greece, the Empress of Russia, and the Princess of Wales; has reigned 26 years. Carol I., King of Roumania, 50, king eight years. Alexander, child-king of Servia, son of King Milan, abdicated a few months ago, after 21 years' rule as Prince and King. Nikita (Nicholas) I., Prince of Montenegro, 48, 28 years ruler. M. Crnot, President of the French Republic, 52, two years in office.

authenticated in some cases, was as follows:
St. Matthew, suffered martyrdom, or slain
with a sword; St. Mark, dragred through the
streets of Alexandria till he expired; St. Luke,
hanged upon an olive-tree in Greece; St. John,
thrown into a caldron of boiling oil at Rome,
but miraculously escaped, afterward dying a
natural death at Ephesus; St. James the Less,
thrown from a pinnacle or wing of the Temple
at Jerusalem, then beaten to death with a
fuller's club; St. Phillip, hanged against a pillar at Hierapolis; St. Bartholomew, flayed
alive by command of a barbarian king; St.
Andrew, bound to a cross, whence he preached
unto the people till he expired; St. Thomas,
run through with a lance at Coromandel; St.
Jude, shot to death with arrows; St. Peter,
crucified in Persia with his head downwards,
not deeming himself worthy to die as his Lord
did; St. Matthias, stoned and then beheaded;
St. Barnabas, stoned to death by Jews at Salina; St. Paul, beheaded at Rome under Nero.

According to Catholic authorities, a number of Popes sprang from the common people. Pope John XVIII. from the lowest class, Damascus II. son of a Bavarian peasant, Adrian IV. of a woman who depended on parish alms, Urban IV. son of a cobbler, Nicholas IV. of a poor family, Celestine V. eleventh son of poor people, Benedict XI. son of a vasherwoman, John XXII. of a collector of old rags, Benedict XII. of a miller, Boniface IX. of a poor family fallen from high station, Alexander V. of parents whom he did not know only remembering that he got his bread when a boy by gegging, Nicholas V. of a mother who lived by raising poultry, Sixtus IV. of a fishermen, Adrian VI. of a shipwright, Pius V. of a shepherd and Sixtus V. of a hetman

herd, and Sixtus V. of a hard-man.
Patron Saints: Of England, St. George;
France, St. Denis; Spain, St. James; Italy, St.
Anthony; Scotland, St. Andrew; Ireland, St.
Patriok; Wales, St. David (these are the
legendary "Seven Champions of Christendom"); St. Joseph, of the church universai;
St. Vincent de Paul, of charities; St. Thomas
Aquinas, of schools; St. Camillus of Lellis, of
hospitals; St. Sebastian, of soldiers; St. Bubert, of hunters; St. Monica, of metrons: St.
Agnes, of maidens; St. Pancras, of childhood;
St. Aloysius, of students, youth, and purity;
St. Maxima, of virgins and wives St. Berbara
is invoked for the last sacraments; St. Roch
against contagious diseases; St. Sabine,
against theumatism and gout; St. Apollonia
against toothache; St. Benedict Joseph Labre
against lightning; and St. Blase prevents or
cures sore throats.

cures sore throats.

The Seven Wise Men of Greece, and the mottos each is said to have contributed for inscription upon the temple at Delphi, were as follow: Solon, "Know thyself;" Cleobulus, "Avoid excesses;" Chilo, "Consider the end;" Bias, "Most men are bad;" Pittacus, "Know thy opportunity;" Thales. "Suretyship is the precursor of ruin;" Periander, "Nothing is impossible to industry."

The Pall Mall Gazette some time ago made request for lists of the twelve greatest women in the world's history, which resulted in the following collective vote, given in the order of preference: Joan of Arc, 9: George Sand, 8; Queen Elizabeth, 7; Maria Theresa, 6; George Ellot, 6; Mme Roland, 6; Catherine of Siena, 5: Sappho, 4; Mrs Browning, 4: Esther, 3: Charlotte Bronte, 3; Mme de Stael, 3; Elizabeth Fry, 3; Mary Somerville, 3; Semiramia, 2; Catherine II., 2; Isabella of Castile, 2; Catrerine II., 2; Isabella of Castile, 2; Margaret Fuller, 2; Mary Wollstonecrost 2: Jane Austen, 2; Maria Edgeworth, 3; Florence Nightingale, 2; Judith, 2; Cleopatra, 2; Rosa Bonheur, 2; Mrs. Booth, 2; and Theresa, 2.

# Fictitious Names of Female

Fictitions ratings of Female Wilters.			
PEN-NAME. REAL NAME.	PEN-NAME.	REAL NAME,	
A. L. O. E. (A Lady of	Holme Lee,	. Harriet Parr.	
England) Charlotte Tucker.	Hope Ansted	. Miss Burdett.	
A LadyMrs. Rundeil, also Mrs.	Howard Glyndon	. Miss L. C. Redden.	
Anna Jameson.	Impulsia Gushington	.Lady Dufferin.	
Acheta DomesticaMrs. L. M. Budgery.	Jacque Vincent	. Madame Dussaud.	
Acton BellAnne Bronté.	Jeanie Dods	. Miss Mackay.	
Adelheid von Auer Charlotte von Cosel.	Jennie June	Mrs. J. C. Croly.	
Alton ClydeSarah Anne Jeffreys.	Karl Krone	.Tekla Juel.	
AmeliaMrs. Welby.	Kenner Deane	.Charlotte Smith.	
Amy LothropAnna B. Warner.	K. O	.Olga de Novikoff.	
An American Girl	L. E. L	Letitia E. Landon.	
Abroad	Lactilla	Anne Yearslev.	
An Irish Woman Miss A. Penier.	Laura Barker	Mrs. Tom Taylor.	
Arthur DudleyCharlotte Campbell.	Leader Scott	Lucy E. Baxter.	
Countess of Bury.	Louise Mühlbach	.Clara Mundt.	
Countess of Bury.  Aunt JudyMrs. Alfred Gatty.	Lynde Palmer		
Caller Herrin Annie Smitu.	Marc de MontifaudM		
Charles Egbert Crad-	Margaret Sidney	Mrs. H. M. Lothrop.	
dock Mary N. Murfree.	Markham Howard	Mary Cecil Hay.	
Charlotte ElizabethCharlotte E. Tonna.	Marietta	Harriet M. Bradley.	
Christopher Crowfield, Ars. H. B. Stowe,	Marion Harland	Mrs. Mary V. Terbun	
Christene Severne Mrs. Anna Boulton.	Marion Harland Martha Farquharson	Martha F. Finley.	
Claude Vignon, Mme. Rouvier.	Mary Clavers	Mrs. C. M. Kirkland.	
Claribel Mrs. Barnard.	Mary Powell	Miss M. A. Manning.	
Countess DashVicomtesse de St. Mars.	M. Ludolff		
Cousin AliceAlice B. Neal Haven.	Mrs. Markbam		
Cousin Kate Catherine D. Bell.	Nelsie Brook		
Currer BellCharlotte Bronté Nichols.	Nilla	.Mrs. Abby Allin.	
Daniel DarcMaria Sidonia Regnier.	Olivia	.Emily Edson Briggs.	
Daniel SternMarie Flavigny.	Onyx Titian	Sarah Woodward.	
E. D. E. N	Ouida	Louise de la Ramé.	
Edith May Anne Drinkwater.	Q. Q	. Miss Jane Taylor.	
Edith May Anne Drinkwater. Elizabeth WetherellSusan Warner.	Patience Thornton	Mrs. Wm. Stapleton.	
Ellis BellEmily J. Bronté.	Raoul de Naverv	. Marie D. Saffron.	
E. Marlitt Eugenia John.	Sarah Tvtler	. Miss Keddie.	
Fanny Fern Mrs. James Parton.	Saxe Holm	Miss Rush Ellis (?).	
Fanny Forester Mrs. E. Judson.	Shirley Dare	Mrs. S. D. Power.	
Fernan Caballero Dona Cecelia Arrom,	Silverpen		
Florence PercyMrs. E. Akers Allen.	Sophie MayMr	s. Rebecca Š. Eckerso:	
Franz von Neumens-	Speranza	.Lady Wilde.	
dorf Franziska von Reitzenstein.	Stella	.Mrs. Estella A. Lew	
Gail Hamilton Mary Abigail Dodge.		and five others.	
Garth GodfreyMrs. Agnes Leonard Hill.	Sydney A. Story, Jr	Mrs. Mary H. Pike.	
George Eliot Marian Evans Lewes Cross.	Tabor	Mrs. Edw. Robinson.	
George FlemingJulia C. Fletcher.	Talvi	me. Theresa Robertso	
George Sand Madame Dudevant.	Trafford, F. G	Mrs. J. Riddell.	
Grace Greenwood Mrs. Sara J. Lippincott.	TrilbyVi	comtesse de Pevrome	
Harriett MyrtleMrs. L. Miller.	Trusta, H	Elizabeth S. Phelps.	
The Forty Immortals			

f Female Writers.	
PEN-NAME.	REAL NAME.
Holme Lee,	. Harriet Parr.
Hope Ansted	.Miss Burdett.
Howard Glyndon	. Miss L. C. Redden.
Impulsia Gushington	Lady Dufferin.
Jacque Vincent	. Madame Dussaud.
Jeanie Dods Jennie June	. Miss Mackay.
Jennie June	.Mrs. J. C. Croly.
Karl Krone	.Tekia Juel.
Kenner Deane	.Charlotte Smith.
K. O	.Ulga de Novikon.
L. E. L.	Letitia E. Landon,
Lactilla	Anne Yearstey.
Laura Barker	. Mrs. Tom Taylor.
Leader Scott Louise Mühlbach	Clore Mundt
Lynde Palmer	Mrs. Marr. Doobles
Marada Montifond M	arie Amelia Montifaud.
Margaret Sidney	Mrs H M Lotheon
Markham Howard	Mary Cool Hor
Marietta	Harriet M Bradley
Marion Harland	Mrs Mary V. Terbune
Martha Farouharson	Martha F Finley
Mary Clavers	Harriet M. Bradley. Mrs. Mary V. Terhune. Martha F. Finley. Mrs. C. M. Kirkland.
Mary Powell	Miss M. A. Manning.
M. Ludolff	Louise Huyn.
Mrs. Markbam	
Nelsie Brook	Mrs. Ellen Ross.
Nilla	.Mrs. Abby Allin.
Olivia Onyx Titian	.Emily Edson Briggs.
Onyx Titian	.Sarah Woodward.
Ouida	. Louise de la Ramé.
Q. Q	. Miss Jane Taylor.
Patience Thornton	.Mrs. Wm. Stapleton.
Raoul de Navery	. Marie D. Saffron.
Sarah Tytler	. Miss Keddie.
Saxe Holm	Miss Rush Ellis (?).
Shirley Dare	.Mrs. S. D. Power.
Silverpen	.Eliza Meteyard.
Sophie MayMr	s. Rebecca S. Eckerson.
Speranza	.Lady Wilde. .Mrs. Estella A. Lewis
Stella	Mrs. Estella A. Lewis
G-4 A GA Tn	and five others.
Sydney A. Story, Jr	. Mrs. Mary H. Pike.
Tabor	me. Theresa Robertson.
Trefford F G	Mrs T Diddell

#### The Forty Immortals.

The Institute of France, the most fair ous learned body in the world, was created by decree of the Directory, October 25, 1795, and consists of five academies—the French Academy, founded by Richelleu in 1635; that of Fine Arts, founded between 1648 and 1871; that of Fine Arts, founded between 1648 and 1871; that of Inscriptions and Belle Lettres, founded by Colbert about 1663; that of Sciences, by the same in 1666, and that of Moral and Political Sciences, reconstituted in 1832. Each consists of forty members (except the Academy of Sciences, 66), besides unartached and corresponding members and foreign associates. The most renowned of these bodies is the French Acad my, whose members, "The Forty Immortals," are as follow:

bers, "The Forty Immortals," are as follow: Sully-Prudhomme, popular poet.
Yictor Duruy, historian and ex-Minister.
Leon Say, political economist and Senator.
Octave Feuillet, novelist and dramatist. Greard. French administrateur. Legouvé, dramatist.

Joseph Bertrand, mathematician. Victorica Sardou, dramatist. Leconte de Lisle, political writer.

John Lemouine, politician. C. Rousset, historian. laxime Du Camp. literarian Xavier Marmier, traveler and writer.

Duede Broglie, politician and son of ex-

Jurien de la Gravier, writer on maritime

Mrs. J. Riddell. ......Vicomtesse de Peyromey.

topics.
Ferdinand de Lesseps, engineer. Henri Taine, author and critic De Vogue, writer on Russian literature. Emile Augier, moralist of the drama. Alexandre Dumas, novelist and dramatist. Pailleron, dramatist.

Jules Clarétie, writer and Director of the Comedie Française.

Mezières, professor and literarian. Renan, writer and professor. Cherbuliez, novelist

Edouard Hervé, publicist and journalist. Emile Ollivier, lawyer, politician, and ex-Mini-ter

De Mazade, publicist and author, Rousse, lawyer and jurist, Duc d'Audriffet Pasquel, politician and Senator.

Pasteur, scientist and physician. Henri Meilhac, novelist and playwright.

Camille Doucet, dramatist. François Coppée, poet.

Gaston Loissier, professor of literature, Duc d'Almale, fourth son of Louis Philippe. Mgr. Perraud, colesiastical writer.

Ludovic Halévy, dramatist.

Jules Simon, politician.

Comte d'Hauteville, Senator and political

writer.

#### Nicknames of Union Generals.

GRANT-Unconditional Surrender, Old United States, Old Three Stars (when lieutenantgeneral.)

SHERMAN-Old Tecumseh, Tecump, Pap Sherman.

SHERIDAN—Little Phil.
THOMAS—Old Reliable, the Rock of Chickamauga, Pap Thomas.

MEADE—Four-eyed George (from his spec-

tacles).

BURNSIDE—Old Burny, Rhody.
HOOKER—Fighting Joe.
MCCLELLAN—Little Mac.
HALLECK—Old Brains.
POPE—Saddle-bag John (from his famous headquarters-in-the-saddle" order.)

BUTLER—Cock-eye. HANCOCK—The Superb. KEARNEY—One-armed Phil.

HUMPHREY-Old Mathematics (eminent as

engineer).
CRAWFORD—Physics (he had been a doctor).

Sigel—Dutchy.
Sykes—Sykesy (among New Yorkers of the Fifth corps).

ROSECRANS

LOGAN-Black Jack. The McCooks—Fighting McCooks. KILPATRICK—Little Kill.

CUSTER-Ringlets (from his long, flowing

curls).
LEW WALLACE-Louisa (in his own com-

mand) Admiral Farragut was "Old Salamander," On the Confederate side, Admiral Semmes was "Old Beeswax." General Mahone "Skin and Bone," and General Early "Bad Old Man."

# The Poets-Laureate, Etc.

The first poet-laureate of England is said to The first poet-laureage of England is said to have been Chaucer, under appointment of Edward III., 1367. His known successors were Henry Scogan, under Henry IV.; John Kry (or Cain), Edward IV.; Andrew Bernard, Henry VII. and VIII. The later succession is as follows: Ben Jonson, appointed 1630; Wm. Davenant, 1637; John Dryden, 1670; Thos. Shadwell, 1689; Nahum Tate, 1693; Nicholas Rowe, 1714. Lawrence Englen, 1719; Colley Shadwell, 1689; Nahum Tate, 1693; Nicholas Rowe, 1714; Lawrence Eusden, 1719; Colley Cibber, 1730; Wm. Whitehead, 1758; Thos. Warton, 1785; Henry James Pye, 1790; Robert Southey, 1813; Wm. Wordsvorth, 1843; Alfred Tennyson, 1850. Since 1830 the laureate has been named by the Lord Chamberlain. Chaucer, and very likely his successors, were given 100 marks and a tierce of Malvoisie wine a year: Ban Jonson and the rest \$100. wine a year; Ben Jonson and the rest £100 and a tierce of Canary wine, until Southey's time, when £27 were added instead of the wine. An annual court ode was expected of the laureate, until the final derangement of George III., in 1810. Since Southey the poet has written as he liked; Wordsworth returned nothing, and Tennyson comparatively little, for the honor and emoluments of the office.

FINGER-NAILS grow more rapidly on children than on adults, and most slowly on the aged; faster in summer than in winter, so that a nail requiring 182 days for full renewal in win-ter needs only 116 days in summer; faster on the right hand than the left; and faster on the middle finger than on the others, about equally on the second and fifth, slower on the little finger, and slowest of all on the thumb. Long nails indicate a temporizing disposition and hatred of "scenes"; broad, bashful and gentle natures; small and round, obstinacy; crooked, flerceness and cruelty; narrow, mis-chief; filbert-shaped, deceit; red, martial nature; pink, indolence; abnormally pale, or with black spots, sickness.

THE following simple rules for care of the piano, by Rev. H. R. Haweis, of England, one of the acutest and most scholarly writers of our time on musical topics, are from his cele-brated book on "Music and Morals": "Keep brated book of "Music and Morais": "Acepy your piano out of damp rooms. Never place it too near the fire or the window, or between them. or in a draught; but place it at least a foot from the wall or in the middle of the room. Do not load the top of it with books; and if it is a cottage, don't turn the bottom. as I have known some people do, into a cup-board for wine and dessert. Keep the keys carefully dusted, and always shut down the lid when you have done playing."

It is estimated that there are now 300 lepers in this country, against about 50 only ten years

OF 26 English barons who signed Magna Charta, or the Great Charter (June 15, 1215), only three could write their names. The rest signed by mark.

To count a trillion, at the rate of 200 a minute, day and night incessantly, would take over 9512 years. Yet it takes only 13 figures to express a trillion - or less than ten trillions.

OF 1000 deaths, 41 occur by violence in this country, 18 in Europe. In the latter Switzer-land has the largest number, 38; Russia the smallest, 7. About 11 per cent of all deaths in the United States are by some form of nervous disease.

A NEW textile, locally called kanaff, has been found on the shores of the Caspian,—a plant ten feet high and about an inch through. It is soft, elastic, and silky, gives a thread which is very tough, and can be chemically bleached without losing value. Stuffs manufactured from it bleached can be successfully dyed in every shade, and compete with any ordinary furnishing material now in use.

THE deepest mine in the world is probably the Rosebridge colliery, near Wigan, Eng., 2445 feet, or nearly half a mile, deep. The oldest in the United States, still operated, is the mine La Motte, in the Eastern Missouri lead district. It was opened about 1720 by Percault, an explorer in the interest of Law's swindling Mississippi Company, and was named from the mineralogist of the expedition.

THE main strength of American wrought iron is 45.900 pounds; of English, 48,741. Ultimate extension of wrought iron, one six-hundredth part of its length; working strain, from dredth part of its length; working strain, from one-sixth to one-fourth the main strength. Resistance to flexure acting evenly over the surface equals one-half the tensile strength. Bars of wrought fron will expand or contract 1-151200th of their length for each degree of heat. With range of temperature of the country (—20 to +120°) 140°, they will expand or contract 1080th part of the length, equal to a force of 20,740 pounds, or nine and a quarter tons per square inch or section. Tensile strength increases, in from one to six reheatings and rollings, from 43,844 pounds to 2018 ings and rollings, from 48,904 pounds to 60,660 pounds; in from 6 to 12, it is reduced again 40 43,904.

# How a Young Man Can Succeed.

ANDREW CARNEGIE.

You are about to start in life, and it is well that young men should begin at the beginning and occupy the most subordinate positions. Many of the business men of Pittsburg had a serious responsibility thrust upon them at the very threshold of their career. They were introduced to the broom, and spent the first hours of their business lives sweeping out into nours of the foliation when the office. I was a sweeper myself; and who do you suppose were my fellow-sweepers? David McCargo, now superintendent of the Allegheny Valley railroad; Robert Pitcairn, superintendent of the Pennsylvania railroad;

and Mr. Moreland, city attorney of Pittsburg. Begin at the beginning, but aim high. I would not give a fig for the young man who does not already see himself the partner or

the head of some important firm.

There are three dangers in your path. The first is the drinking of liquor, the second is speculation, and the third is "endorsing." When I was a telegraph operator in Pittsburg. when I was a telegraph operator in Pittsourg.

I knew all the men who speculated. They were not our citizens of first repute; they were regarded with suspicion. I have lived to see all of them ruined, bankrupt in money and bankrupt in character. There is scarcely an instance of a man who has made a fortime by speculation, and kept it. The man who grasps the morning papers to see how his speculative ventures are likely to result unfits himself for the calm consideration and proper solution of business problems with proper solution or ourness proofers when which he has to deal later in the day, and saps the sources of that persistent and concentrated energy upon which depend the permanent success and often the very safety of his main business. The thorough man of business knows that only by years of patient, unremitting attention to affairs can he earn his reward, which is the result, not of chance, but of well-devised means for the attainment of ends.

Nothing is more essential to young business men than untarnished credit, and nothing kills credit sooner than the knowledge in any bank board that a man engages in speculation. How can a man be credited whose resources may be swept away in one hour by a panic among gamesters? Resolve to be business men; but speculators never.

The third danger is the perilous habit of endorsing notes. It appeals to your generous instincts, and you say, "How can I refuse to lend my name only to assist a friend?" It is because there is so much that is true and commendable in that view that the practice is so dangerous. If you owe anything, all your capital and all your effects are a solemn trust in your hands, to be held inviolate for the security of those who have trusted you. When a man in debt endorses for another, it is not his own credit or his own capital that he risks: it is the money of his own credi-tors. Therefore, I say that if you are ever called upon to endorse, never do it unless you have cash means not required for your own

debts, and never endorse beyond those means.
Assuming that you are safe in regard to
these your gravest dangers,—drinking, speculating, and endorsing,—the question is: How to rise? The rising man must do something exceptional, and beyond the range of his special department. He must attract attention.

A shipping clerk may do so by discovering in an invoice an error with which he has nothing to do, and which has escaped the attention of the proper person. If a weighing clerk, he may save for the firm by doubting the adjustment of the scales, and having them corrected. Your employer must find out that he has not

got a mere hireling in his service, but a man; not one who is content to give so many hours of work for so many dollars in return, but one or work for so many conars in return, out one who devotes his spare hours and constant thoughts to the business. Our young partners in Carnegie Brothers have won their spurs by showing that we did not know half as well what was wanted as they did.

There is one sure mark of the coming millionaire,—his revenues always exceed his expenditures. He begins to save as soon as be begins to earn. Capitalists trust the saving young man. For every hundred dollars you can produce as the result of hard won savings, Midas, in search of a partner, will lend on credit a thousand; for every thousand, fifty thousand. It is not capital your seniors require; it is the man who has proved he has the business habits which make capital. Be-gin at once to lay up something. It is the first gin at once to lay up something. I hundred dollars saved which tells.

And here is the prime condition of success, And here is the prime conductor of success, the great secret,—concentrate your energy, thought, and capital exclusively upon the business in which you are engaged. Having begun on one line, resolve to fight it out on that line, to lead in it, adopt every improvement, have the best machinery, and know the

most about it.

Finally, do not be impatient, for, as Emerson says, "No one can cheat you out of ultimate success but yourselves."

CHEW gum only when afflicted with drowsi-

An English nobleman has this motto: "Be what you seem to be;" another lord this: "Let your desire obey your reason;" and a third: "God is my best support." An American gentleman adopts for his motto: "I must first be correct and than dealed." I must first be correct, and then decisive.

In the United States 45 per cent of the In the United States 40 per cent or the farms are over 100 acres each; in France 56 per cent are less than 12½ acres apiece. More than one-half of Belgium is under cultivation; in Ireland half the land is in pasture; in Sweden 60 per cent is forest. France has 5,500,000 land-owners, and four-fifths as many farmers; Great Britain has 321,386 land-holders owning each over one acre.

According to Prof. Hadley, the speed of railroad trains is restricted within three theoretical limits: First, a physical limit of eighty miles an hour, beyond which it is found impossible for a train to hold the track; second, an operating limit of sixty miles an hour, which practical experience has found trains cannot run without much damage to life; third, a commercial limit of thirty miles per hour, at which, all things considered, it is found most economical to run a train. run a train.

THE percentage of nutrition in human foods The percentage of nutrition in human foods is nearly as follows: Raw oils, 95; boiled peas, 93; butter and boiled barley, 92; corn bread, 91; wheat bread, 90; barley bread and boiled rice, 85; boiled beans, 87; rye bread, 79; oatmeal porridge, 75; broiled mutton, 80; plums, 29; grapes, 27; roast beef and poultry, 26; roast pork and veal, 24; potatoes, 224; broiled venison, 22; broiled codfish, 21; peaches, 20; apples, 16; beets, 14; eggs, 13; currants, 10; cabbage, 7½; milk, 7; turnips, 4½; melons, 3; cucumbers, 2.

#### Recent Fads, and Points in Etiquette.

MANNERS FOR BOYS.—In the street: Hat lifted when saying "Good-bye," or "How do you do?" also when offering a lady a seat or acknowledging a favor. Keep step with any one you walf with. Always precede a lady up stairs, but ask if you shall precede her in going through a crowd or public place. At the street door: Hat off the moment you step into a private hall or office. Let a lady pass first always, unless she asks you to precede her. Hat

ede her.

In the parlor: Stand till every lady in the room, also older people, are seated. Rise if a lady enters the room after you are seated, and stand till she takes a seat. Let ladies pass through a door first, standing aside for them. Look people straight in the face when they are speaking to you.

In the dining-room: Take your seat after ladies and elders. Never play with your knife, ring, or spoon. Do not take your napkin up a low as others, and finish the course when they

slow as others, and finish the course when they do. Do not ask to be excused before the others, unless the reason is imperative. Rise when the ladies leave the room, and stand till they are out. If all go together, the gentle-men stand by the door till the ladies pars. FOOD FROM FINGERS.—The list of things that

can be eaten from the fingers is on the increase. It is now held to include all bread, crease. It is now neid to include all break, toast, tarts, and small cakes, celery, and asparagus, when served whole, as it should be, either hot or cold; lettuce, which must be crumpled in the fingers and dipped in sait or sauce; olives, to which a fork should never be put any more than a knife on raw oysters; strawberries, when served with the stems on, as they should be, touched to pulverized sugar; cheese in all forms except Brie or Requefort or Cumbefort; and fruit of all kinds, except preserves and melens. The latter should be eaten with a spoon or fork. In the use of the eaten with a spoon of fork. In the use of the fingers greater indulgence is being shown, and you cannot, if you are well-bred, make any very bad mistake in this direction, especially when the finger-bowl stands by and the napkin is handy.

CLASS 123 .- The official "Court Etiquette" of England, as given in the book of that title, ranks the following-resignated persons away down in Class 123: "Protessional gentlemen down in Class 123: "Professional gentlemen-as solicitors, attorneys, proctors, engineers, architects, medical practitioners (not being physicians), artists, literary men, merchants, master-manufacturers, scientific professors, and others not engaged in manual labor, farm-ing of land, or retail trade." The Kiss to Queens.—Persons presented to Queen Victoria and given her hand to kiss, must in no case touch the nose to it. There is

a hint in this for the favored ones allowed to

salute our American queens,
FADS.—A bouquet of white roses bung on a bell-knob of the house of a dead person, along with the crape, is a new idea in trappings of

Door knobs and bell handles of the famous

are now being collected as souvenirs in London, imitating the old fashion of preserving the knockers of the great houses.

Cooking utensils lined with silver are being introduced for people who think that contact with copper or from harms the food, and whose

purses can afford the hobby.

The fashionable "accordion" dress may well be called a new wrinkle. It is all wrinkled from weist to hem, like the folds of an accordion. The effect is odd and rather pretty, but dion. The effect is ord and rather pretty, out its cheapness may antagonize its popularity.
"Memory hoops" are the latest sweet things of fashion out in Kansas City. The memory hoop is about to inches in diameter, and is intended to hold a number of bows or knots which are presented to the owner of the

hoop.
The newest occupation for woman is said to be that of superintendent of weddings. The superintendent, who is usually a youngish woman, is installed in the house of the bride woman, is instanced in the house of the draw to be some little time before the ceremony. She selects the trousseau, tells the bride's mother and sixters what to wear, dictates to the bridemaids, thinks of everything, and lets the engaged couple enjoy themselves with

unanxious minds.

Pronouncing in Geography.

In pronouncing the name of Helena, Montana, the accent should be on the first syllable; but in pronouncing Helena, Ark., the accent should be on the second syllable, long e. Wil-lamette, name of river and valley in Oregon, has its accent on the second syllable, "lam." The pronunciation of Arkansas as it is spelled is improper—it is Ark-an-saw, accent on the first syllable, as fixed by act of Legislature in that State; but Kansas is pronounced as it is spelled—not Kansaw, after the manner of its neighboring State. It is interesting to note that the spelling of the capital of Iowa was made "Demoine" by act of the Hawkeye Legislature a few years ago; but it did not stick, so Des Moines is the right spelling, and is likely to be for all time to come. It is a little d fficult for a native Yank' e to pronounce New Orleans. The unsophisticated make the elong in the second syllable, and get laughed at for their mistake. They should say 'Orleans,' with the accent on the first syllable, short e in the second. This is not exactly as a native accents it, but it is as near as can be put on paper. that State; but Kansas is pronounced as it is put on paper.

Some local pronunciations in New Jersey are puzzling. For instance, Hibernia is called Highbarney, Charlotteburgh is spoken of by old-timers as Slottenburgh. Sparta is Sparty, Newfoundland is New-fun-land with the accent on the land, Wequahick is Wake Cake, Ches-

qualick is Cheesequake, Acquackanonck is Quacknack, and Wanaque is Why-nockie. with the accent on the why; Caldwell is Callwell, and Parsippany is Persippy, Plaquemin (French) has become Pluckamin, even in spelling, while Newark is Noork or Newick.

THE average weight of an adult person is 150% pounds; of a skeleton, about 14 pounds.

Losses in ancient battles were sometimes LOSSES IN ancient battles were sometimes enormous. At Platea 280,000 Persians are said to have fallen; at Chæronea and each of two other battles. Sylla is recorded to have killed 800,000 of his enemies; and according to 2 Chronicles. xiii. 17, 500,000 Israellies were claim though package not in according to be the complete of the control of the cont slain, though perhaps not in a single battle. In some of these cases the figures are disputed.

The deepest ocean soundings yet taken, that are not open to dispute, are 3875 fathoms, or nearly 4½ miles, about 40 miles north of the Virgin Islands, in the South Seas, and 4475 fathoms, or a little over 5 miles, near New Guinea. The Atlantic has been more amply and carefully sounded than any other ocean, and few parts of it have a depth exceeding 34 miles. A limited basin about 100 miles north of St. Thomas is 3875 fathoms or where 44 miles. A limited basin about 100 miles north of St. Thomas is 3875 fathoms, or about 44 miles, in depth.

The Great Railway Bridges and Tunnels, Etc.

The longest railway bridge in the world is still the new one across the Tay at Dundre, still the new one across the Tay at Dundre, Scolland, in place of that ruined at the terrible railroad deaster Dec. 24, 1879, from which not a soul escaped. It is about 11,000 feet long The next longest is the Victoria, at Montreal, 9437 feet long, of which 7000 are tubular and directly over the St. Lawrence. One is projected to span the same river at Quebec, 34,000 feet, or nearly 6½ miles, from Point Levi, with its top 408 feet above high water, and one span 1442 feet long. The great suspension bridge a ross the East River, between New York and Brooklyn, is 5899 feet long, 15954 in a ingle s an above the river, long, 159514 in a ingle s an above the river, 135 feet above high water and 80 feet wide, with towers 277 feet high, the whole built and equipped at a cost of about \$15,000.000. The new suspension bridge across the Forth at Queensbury, Scotland, is about 11/2 miles long. Queensbury, Scotland, is about 1½ miles long, with one -pan as leng as main span of East River bridge. The Parkersburg (W. Va.) is 7045 feet long; St. Charles, Mo., 6538; Louis-ville, 5310; over the Delaware. 4920; over the Rhine at Mayence. 3980; near Bombay, India, 3730; Omaha, 2800; Quincy, Ill., 2730; Cincinnati, 2220; St. Louis. 2045, cosling with approaches about \$9,900,000; Menai Straits, England (the first great bridge, one-ned 1850), 1833; Suspension, Niagara, 1268. The draw of the new Shore Line bridge over the Thames.

1835; Suspension, Ñiagara, 1268. The draw of the new Shore Line bridge over the Thames, at New London, Conn., is 503 feet, the longest in the world. This bridge cost \$1,600,000. The great European railway tunnels are the Arlberg, 6½ miles long; Mt. Cenis, between Italy and France, at the juncti nof the Cottian and Graian Alps, 7.6 miles long, built 1873-70; and the St. Gothard, in the Swiss Alps, 9.4 miles long, built 1873-80, and the longest tunnel as yet in the world. The Simplon tunnel, now building, will be 12½ miles long. A tunnel under the British Channel, 31 miles long, 29 of them under the sea, was prolong. A tunnel under the British Channel, 31 miles long, 22 of them under the sea, was projected in 1872, and some work on it done. The tunnel under the Severn river, England, built 872-1886, is in length nearly 4½ miles, and cost about \$10,000 000. In this country the great tunnels are the Hoosac, on the western border of Massachusetts, 4¾ miles long, built 1854-73, costing \$10.000.000; and that on the Northern Pacific railway, through the Cascade Mountains, Washington, nearly two miles long.

miles long.

The first cost of a first-class ocean-steam-ship is from \$800,000 to \$1,200,000. The Great Eastern, now broken up for its material, was the largest ever built.—680 feet long, breadth 118 feet, and height 58 feet, or 70 feet to top of bulwarks. It had eight engines, with a total of 11,000 horse-power, besides 20 smaller or auxiliary engines, carried 7000 wards of or auxiliary engines, carried 7000 yards of sail, and its tonnage, for coal and merchan-dise, was 20,000. It was bull 1846-57, and took 80 days to launch, at a cost of \$300,000. It never paid expenses.

THE best way to separate stamps that have become stuck together, to remove stamps from letters, or gummed slips from anything, is to hold them for a moment in steam, when they will readily separate. A slower and not quite so pleasant a method, is to moisten them repeatedly with salva. Placing them in water will effectually separate, but it soaks off all the adhesive substance.

THE Young People's Societies of Christian Endeavor have grown from two in 1881, with 68 members, to 7672 and 485,000 to July 1, 1889. In 1888 there were 4879 and 310,000.

THE whale is b-lieved to be the long-st-lived animal, at 400 years. Then come the elephant, at 300; the camel, 40 to 50; the horse, 20 to 30; ox, about 20; dog, 12 to 14; and sheep, 8 or 9. A tortoise has been known to live 120 years, the carp 200, and the pike 90. Of birds, the wren lives about 3 years; the sparrow hawk, 40; nightingale, 18; goose and pelican, 50; heron and parrot, 60; thrush and common domestic fowl. 10: robin. lark and common domestic fowl, 10; robin, lark, and blackbird. 12; cr.w, raven, eagle, swan, 100; canary. crane, and peacock, 24; pigeon and linnet, 20 to 23. Insects commonly live but a few days or weeks after they change from grub or caterpillar.

SEVERAL of our customs are relics of old I-hmaelite days, when every man's hand was against every other. Lifting the hat is a reminiscence of removing the helmet, to show confidence that the person met would not split the other's head with sword or battle-ax. Offering the hand for shaking originally indi-cated that it was not only friendly, but un-weaponed. The buttons upon the back of a coat, often condemned as useless, once served to support the sword-belt. To "present arms" is to make a nominal presentation of the soldier's weapon.

To test the purity of water: Put a half-pint in a bottle thoroughly clean, add a few grains of lump or loaf sugar, cork tightly, with glass stopper if at hand, and place in a warm, well-lighted room. If the water is clear at the end of sight or ten deep it is of eight or ten days, it is pure enough to use safely; if turbid, it is impure and unsafe. A method of purifying: Dissolve half an ounce of alum in a cup of boiling water, pour into a quart measure, fill up with cold water, and pour into bottle labeled "alum water." A teaspoonful of this in each gallon of water will fit it for use.

THE "standard gauge" of railways throughout the world is now 4 feet 8½ inches, and there remain few "broad-gaure," or 6-foot roads. "Narrow gauge" is commonly 3 feet, but the first one, built in Wales, was only 2 feet. A road with but 10-inch gauge was built some years ago from North Billerica to Bedford, Mass., laid with rail weighing 25 pounds to the yard, and equipped with 8-ton engines. It cost about \$4500 a mile.

THE ground in Northern Siberia is said to be frozen permanently to the depth of 660 feet, below which internal heat prevents freezing. The surface in summer is thawed to the depth of but three or four feet before cold weather

Singing birds take rank for melody as follow: Nightingale. linnet, titlark, skylark, woodlark. The robin and goldfinch are first for vocal power, the mocking-bird for imita-tions. The English sparrow has not yet been placed for melody.

An authority of ten years ago savs "that the Chinese, with all their ingenuity, have never made a barrel." It is not known who invented the barrel, or when it was introduced.

THERE are 101 geographical societies in the world. France has 29, Germany 22, and Great. Britain 9.

Werchojansk, Siberia, is the coldest town in the world, with thermometer sometimes at 890 below. Atlantic Telegraphs, and Telegraphs Generally, Etc.

Atlantic Telegraphs, and T Five Atlantic telegraph companies are using ten submarine cables to this country, as follow: The Anglo-American Telegraph Co., three cables, from Valentia, Ireland, to Heart's Content, N. F., and one from Brest, France, to the Island of St. Pierre, off the south coast of Newfoundland; the Direct United States Cable Co., one cable, Ballinskelligs, Ireland, to Halifax, N. S.; the French Telegraph Co., from Paris to New York, one cable, Brest to St. Pierre; the American Telegraph and Cable Co., two cables, Cornwall to Canso, N. S.; and the Commercial Cable Co., two cables, Waterville, Ireland, to Canso. The entire length of telegraph lines in the world is 580, 140 miles, about 26 times the earth's circumference. The length of all the wires amounts to 1,624,400 miles, or about 80 times as much. Of the 580, 140 miles 215,100 are in Europe, 170,460 in America, 48,780 in Asia, 25,212 in Australia, and 12,514 in Africa. Besides these lines there are Atterion, 40,70 in Assa, 22,212 in Austrain, and 12,504 in Africa. Besides these lines there are 950 cables, 764 of them, 12,132 nautical miles long, in inland European waters under government control. There are 176 great ocean cables, 100,569 nautical miles long, worked by private companies. Altogether 160,000 telegraphic instruments are in carries. graphic instruments are in service.

HINTS ON ABBREVIATIONS: "Io." is the proper one for lowa (but better write it in full; "Ia." is an optional one for Indiana Don't write "Ind." so that it will look like "Md." "W. T." hereafter stands for Wyom. ing Territory only; hereofore it has led to some confusion, as being used for Washington Territory, now State. "Miss." stands for Mississippi only; "Mo." for Missouri. "Ms." is proposed in attachment to a lady's name, when it is unknown to the writer or printer whether she is Miss or Mrs. An abbreviation which is treaffer word need not take. tion which is itself a word need not take a period after it, as per cent, Sam, Fred. Use abbreviations as little as possible in formal writing or dignified print.

Some Governmental Twists and Turns in

	Date of establishment.	
First republic	1789	18
First empire	1804	11
Bourbon kingdom	1815	1.
Orleanist kingdom.	1830	18
Second republic	1848	
Second empire	1852	18
Third republic	1870	19

Flowers and leaves will keep much longer ps surrounding the stems with moistened powdered willow charcoal. They may be wrapped in a little bed of moss, covered with a bit of green tissue paper to prevent the charcoal from sifting through the moss. A teaspoonful of powdered charcoal put in the water will preserve a bouquet of cut flowers for several days, if the stems of the flowers are several days if the stems of the flowers are cut each day, as the broken end of the flower-stem withers and closes the opening through which the blossom receives its nourishment.

An atom of oxygen or nitrogen is computed by the scientists to have a diameter of one ten-millionth part of a centimeter. Atoms are supposed to be in a state of constant motion, at the rate of seventy miles a minute, and to make them visible, the present highest known magnifying power of the microscope would have to be increased near a thousand-fold.

The longest telephone circuit in Europe was recently opened between Vienua and Leipsic, nearly 350 miles.

THE military resources of the principal European powers, with the Balkan States, are now figured as follow:

HOW HE WINDU ON .	FOITO M *		
•	War	Second	Final
	Strength.	Reserves.	Reserves.
Germany	2,520,000	1,520,000	1,860,000
France	2,440,000	1,570,000	1,700,000
Russia	2,495,000	1,980,000	2,200,000
Italy	1,010,000	1,320,000	1,200,000
Austria	1,145,000	1,470,000	8,700,000
Turkey	620,000	810,000	340,000
Balkan States.	250,000	165,000	195,000
Total	10,480,000	8,335,000	9,195,000

THE Nicaragua Ship Canal, now building. will shorten distances from New York to San will shorten distances from New York to San Francisco by 10,000 miles; to Alaska, 8000: Hong Kong, 4100; Melbourne, 8300; Sandwich Islands, 7800; Valparaiso, 9700; New Orleans to San Francisco, 11,000; to Valparaiso, 9900: Liverpool to San Francisco, 7200; to Mel-bourne, 400; to Hong Kong, 1300; to Yoke-hama, 3900; Hamburg to Acapulco, 7000: France to Tonquin, 1300; and similarly many other distances. other distances.

A TEASPOONFUL of tincture of Peruvian bark. A TEASPOONFUL of fincture of Peruvian bark taken every two hours when the craving for liquor is felt, is said to be a sure cure for the alcoholic appetite. Get the best that can be had. Another remedy, by a famous Russian physician, is considered a sure cure in ten days. Dissolve a grain of strychnine in 200 drops of water, and administer five drops once a day, with a hypodermic syringe.

THE new Japanese Government, under the constitution proclaimed Feb. 11 last, consists of the Emperor or Mikado, a Cabinet of ten persons led by the Minister-President, a Senate of about seventy members, who are selected from those who have rendered great service to the State, a Council of State, and a group of Court Councilors.

Five cities in Kansas are under female government, five women serving as Mayors, and twenty-five on City Councils. Three are per-forming the difficult duties of Police Judge, a dozen are County Superintendents of Public Instruction, and several acting as City Clerk or Treasurer, besides a large number, probably 200, serving on School Boards.

High Prices for Plants: For the original of Magnolia Lenné a German nurseryman paid \$2250. A hybrid lily (Lilium Parkmani) was sold by Francis Parkman, the historian, to an English nurseryman for \$1200. Messrs. Veitch paid \$1800 for a Cypripedium Stonei platytoenium, and \$1400 for two plants of Cattleya Trianse var. Leeana.

St. Peter's, Rome, is the largest Christian church in the world, holding 54,000 persons. Then come Milan Cathedral, 32,000, and St. Paul's, London, 26,000. St. Peter's covers about 5½ acres.

RECOMMENDATIONS OF SOME DOCTORS: Celery for nervous prostration, lettuce for insomnia. warmed lemon slices for gout, oatmeal for flesh, fish for the brain, and very rare beef for consumptives.

To MAKE labels stick to metal: Dip the metal in a strong, hot solution of washing sods, rub it dry, and paint it with onion juice. You can hardly separate metal and paper thus joined.

Concerning Precious Stones.

The largest diamond in the world is the The largest diamond in the world is the Braganza, found in Brazil and now among the Portuguese crown jewels, weighing 1880 carats; but there is much doubt of its being a diamond, as no test of it is ever allowed. The Mattam diamond belongs to the Rajah of Mattam, in Borneo, and weighs 367 carats. Other large diamonds are the Dudley, weighing 254½ carats, and valued at \$750,000; the Forentine Brilliant, owned by the Emperor of Austria, 189½; the Regent or Pitt, among the French crown jewels, cut down from 410 to 136¾ carats, but valued at \$600,000; Star of the South, reduced from 254½ to 125 carats; and the Koh-i-noor, of the English crown jewels, cut from 793 to 186 and again to 1061-16 carats, but the most valuable diamond in the world, at \$2,000,000. The finest blue diamond known is the Hope, in private hands in England, weighing 44½ carats. A Brazilian diamond of 76½ carats, found a few years ago, is of superior quality to the Koh-i-noor. The caratis four grains, or the 130th part of an ounce, troy weight. Gold 18 carats fine, for instance, has 16 parts in 24, or three-fourths of pure gold. A fine brilliant of one carat is worth \$50 to \$150; rose and table diamonds much less. Larger diamonds increase in price very rapidly, in proportion to their weight. Braganza, found in Brazil and now among the diamonds increase in price very rapidly, in proportion to their weight.

The diamonds in the crown of England are worth about \$500,000. Twenty diamonds around the circle are considered worth \$7,500 each; two large center diamonds, \$10,000 each; four crosses, each of 25 diamonds, \$60,000, and four large diamonds on their tops, \$20,000; twelve in the fleur-de-lis, \$50,000, and eighteen smaller ones in the same, \$10,000; and so on. Two circles of pearls about the rim are held to be worth \$15,000.

to be worth \$15,000.

Two or three other gems rank in value pretty nearly with the diamond. The sapphire is worth \$100 to \$150 per carat; the emerald, \$50 to \$800; the oriental ruby, \$100; the cataeye, \$16 to \$50; and the opal, \$15 to \$40.

The following notes concerning superstition about precious stones have been collected by Mr. T. Fairbairn Scott:

Agate quenches thirst, and if held in the mouth allays fever. It is supposed, at least in fable, to render the wearer invisible and to turn the sword of foes against themselves. It is the emblem of health and long life, and is dedicated to June. In the zodiac it stands for Scorpio.

Amber is a cure for sore throat and all glandular swellings. It is said to be a concre-tion of birds' tears. The birds which wept amber were the sisters of Meleager, called Meleagrides, who never ceased weeping for their brother's death.

their brother's death.

Amethyst banishes the desire for drink, and promotes chastity. The Greeks thought it counteracted the effects of wine. The amethyst is an emblem of humility and sobriety. It is dedicated to February and Venus. In the zodiac it represents Sagittarius, in metallurgy copper, in Christian art it is given to St. Matthew, and in the Roman Catholic Church it is set in the pastoral ring of bishops, whence it is called the "prelate's gem."

Cat's eye is considered by the Cingalese as a charm against witchcraft, and to be the abode of some genii.

Coral is a talisman against enchantments, thunder, witchcraft, and other perils of flood and field. It was consecrated to Jupiter and Phosbus. Red coral worn about the person is considered a cure for indigestion.

considered a cure for indigestion.

Crystal induces visions, promotes sleep, and insures good dreams. It is dedicated to the moon, and in metallurgy stands for silver.

Diamond produces somnambulism, and promotes spiritual ecstasy. The diamond is an emblem of innocence, and is dedicated to April and the sun. In the zodiac it stands for Virgo, in metallurgy for gold, in Christian art invulnerable faith.

Emerald promotes friendship and constancy of mind. If a serpent fixes its eyes on an emerald, it becomes olind. It is an emblen, of success in love, and is dedicated to May; in the zodiac it stands for Cancer, in metallurgy for iron, and in Christian art it is given to St. John. It is dedicated to Mars.

Gernet preserves health and ion. It is an

Garnet preserves health and joy. It is an emblem of constancy, and is dedicated to January. This was the carbuncle of the ancients.

Jacinth is also dedicated to January. Loadstone produces somnambulism, is dedicated to Mercury, and in metallurgy stands for quicksilver.

Monstone has the virtue of making trees fruitful and of curing epilepsy. It contains in it an image of the moon, representing its in-crease and decrease every month.

Onyx contains in it an imprisoned devil, which wakes at sunset and causes terror to the wearer, disturbing sleep with ugly dreams, Cupid, with the sharp point of his arrows, cut the nails of Venus during sleep, and the parings, falling into the Indus, sank to the bottom and turned into onyxes. In the zodiac it stands for Aquarius; some say it is the emblem of August and conjugal love; in Christian art it symbolizes sincerity.

Opal is fatal to love, and sows discord be-tween the giver and receiver. Given as an engagement token, it is sure to bring ill-luck. The opal is an emblem of hope, and is dedi-

cated to October.

Ruby. The Burmese believe that the ruby Ruby. The Burmese believe that the ruby ripens like fruit. They say that a ruby in its crude state is colorless, and as it matures changes first to yellow, then to green, then to blue, and lastly to a brilliant red, its highest state of perfection and ripeness. In the zodiac it stands for Aries. Some give it to December and make it the emblem of brilliant success. Samphire produces sompambulism and im.

Sapphire produces somnambulism, and impels the wearer to all good works. In the zodiac it signifies Leo, and in Christian art is dedicated to St. Andrew, emblematic of his heavenly faith and good hope. Some give this

gem to April.

Topaz is favorable to hemorrhages, imparts strength, and promotes digestion. It is an emblem of fidelity, and is dedicated to November. In the zodiac it stands for Taurus, and in Christian art is given to St. James the

Turquoise, given by loving hands, carries with it happiness and good fortune. Its color always pales when the well-being of the giver is in peril. It is an emblem of prosperity, and is dedicated to December. In the zodiac it stands for Saturn, and in metallurgy for lead.

A bouquet composed of diamonds, load-

stones, and sapphires combined, renders a person almost invincible and wholly irresistible.

All precious stones are purified by honey.

A DELICATE glue, for mounting ferns and the like, is made of five parts gum arabic, three parts white sugar, two parts starch, and a parts white sugar, two parts starch, and a very little water. Boil until thick and white.

SLEEPING-ROOMS in winter should have a temperature of about 65°, sitting rooms not far from 70°. Open the doors of sleeping-rooms having no fire, but connected with other rooms that do have it.

Length of Degrees of Longitude, Etc.

A degree of longitude at the equator is 69.16 miles long; on the 10th parallel of north or south latitude, 68.12; latitude 20°, 65.02; 30°, 59.94; 40°, 53.05; 50°, 44.54; 60°, 34.67; 70°, 28.72; 80°, 12.05; at the pole (30°), nothing. Intermediate degrees, as 42°, 54°, etc., can be easily computed from these, and are sometimes useful in ascertaining distances east and west in direct lines. The soveral lengths given are, however, calculated as for a regular sphere, and so are not precisely accurate for the irregular ellipsoid which the earth is. In geodetic surveys aiming at absolute exactness, slight corrections have to be added or deducted; but the figures above are sufficiently near for all ordinary purposes. The small variation of the earth from a perfect sphere also causes the degree of latitude to increase very gradually from the equator to the poles. It is 68.702 miles in length at the former, and 69.396 at the latter,—nowhere precisely 69½ miles, as given in the customary tables.

The highest mountain in the Western Hemisphere is now believed to be Mt. Sorate in the Bolivian Andes, at 24,600 feet high, or more than 434 miles. Then come Sahama, 23,000 feet; Anoncagua, 22,422; Chimborazo, 21,424: and Illimani, 21,300,—all Andean mountains. In North America the highest is Mt. St. Elias, in Alaska, which the U. S. Coast Survey finds to be 19,500 feet high, though one recent measurer of Mt. Popocatapetl claims for it the loftiest eminence, at 20,000 feet. Mt. Whitney, in the high Rockies, is 14,887 feet high; Mt. Tacoma, or Rainier, in Washington, 14,448; Mt. Shasta, California, 14,444. The highest mountain in the world is Gaurisankur (commonly called Mt. Everest), in the Himalayas, 29,025 feet, or almost 5½ miles, high.

Public charities of any kind were hardly known before the Christian era, but hospitals for the sick and poor are said to have been founded by the Buddhists in India about 220 B. C. They became established institutions in the fourth century A. D., and blind and insane asylums about the seventh century, though the first blind asylum of modern character was not founded until 1784, in Paris.

The boiling-point of various liquids at the sea-level is as follows: Sulphurous acid, 17 6º Fahrenheit; aldehyde, 71.8; ether, 96.3; carbon bisulphide, 118.6; acetone, 183.3; bromine, 145.5; wood spirit, 151.3; ethylic (common) alcohol, 173; benzole, 177.4; water, 212; butyric ether, 238.8; perchloride of tin, 240.2; terchloride of arsenic, 273; bromide of silicon, 306; terebene, 322.9; naphthalin, 422.2; sulphuric acid, 620; mercury, 662. An elevation of 510 feet reduces the boiling-point of water one degree. At the City of Mexico, 747.1 feet high, water boils at 198.1; at Quito, 9341 feet high, 194; at inhabited places in the Himalayas, 18,000 feet, at 180.

Wedding celebrations are now reckoned to occur as follow: First anniversary, cotton; second, paper; third. leather; fifth, wooden; seventh, woolen; tenth, tin; twelfth, silk and fine linen; fifteenth, crystal; twentieth. china; twenty-fifth, silver; thirtieth, pearl; fortieth, ruby; fiftieth, golden; seventy-fifth, diamond.

THE comparative size of the principal heavenly bodies in our solar system, reckoning the earth as 1, is the moon .03; Mercury, .053; Mars, .125; Venus, .909; Uranus, .80; Neptune, 7143; Saturn, .771; Jupiter, .1456; the sun, 1,412,921,1.

The confederated republics of the world are the United States of America (42 States), Mexico (27), Venezuela (21), Argentine Confederation (14), Colombia (9), Liberia (4), and Switzerland (23 cantons). The integral or unfederated republics are France, Chili. Bolivia, Peru, Ecuador, Guatemala, Costa Rica, Honduras, Nicaragua, San Salvador, Paraguay, Uruguay, Hayti, San Domingo, Congo Free State, and the Orange Free State. The federative empires are Germany (4 kingdoms, 6 grand-duchies, 5 duchies, 7 princ palities, 3 free towns, and 1 imperial territory), and Austria-Hungary. Sweden and Norway are two kingdoms under one crown. Other constitutional monarchies are Great Britain, Spain, Portugal, Belgium, the Netherlands (Holland), Denmark, Italy, Greece, Roumanis, Servia, and Brazil. The despotisms are Russia, Turkey, Montenegero, Morocco, Aby ssinia, China, Japan, Persia, Siam, and Afghanistan.

The resources of the English language have seldom been more severely taxed than by sportsmen, in the ingenious effort to give a separate name to each group of animals, birds, etc. Thus, they name a gang of elk, a drove of oxen, a herd or bunch of cattle, a pride of lions, a sleuth of bears, a herd of swine (or sounder of hogs). a pack of wolves, a skulk of foxes, a troop of monkeys, a plump of wildfowl, a muster of peacocks, a flock of gress, a brood of grouse, a cover of partridges, a nide of pheasants, a siege of herons, a cast of hawks, a building of rocks, a clattering of choughs, a watch of nightingsles, a flight of doves or swallows, a stand of plovers, a wisp of snipe, a bevy of qualis, a trip of dottrell, as hool of whales, a shoal of herrings, and a swarm of bees.

THE letters X, XX, and XXX, on envelope boxes show that the envelopes within are made from 40,50, or 60-pound paper. "Light." "medium," and "heavy," are also used to designate these weights. A large figure on the box indicates the length of the envelope,—those marked 6 being "sixes," or 6 inches long, 5 as many inches, and so on.

A RED-HAIRED woman is said to have 88,000 sperarte filaments of hair; a black-haired, 102,000; brown, 109,000; blonde, 140,000. The total length of an average woman's hair may be 40 to 70 miles. A dark brown hair will sustain a strain of 4 ounces without breaking; a blonde hair but 21/4 ounces.

ACCORDING to the Duc de la Vallière's librarian, a bibliophile is a lover of books, a bibliographe a describer of books, a bibliomane a book-mad collector, a bibliotaphe a burier of books in glass cases or under lock and key, and a bibliognoste one learned in the minutize of knowledge concerning books.

A LOCK was shown at one of the world's fairs in Paris, which had 3,674,385 combinations. One man spent 120 nights in fully locking it, another four months in unlocking it, and finally it could be neither-shut nor opened.

THE area of the oceans is roughly calculated as follows: Pacific, 71,000,000 square miles; Atlantic, 35,000,000; Indian. 28,000,000; Antarcic, 8,500,000; Arctic, 4,500,000.

If borax or ammonia is used instead of soap in washing blankets, it will go far to keep the softness and brightness of the colored stripes.

#### Thermometers.

Zero in the common or Fahrenheit thermometer is 32° below the freezing point, and is supposed to mark the lowest degree of cold is supposed to mark the lowest degree of con-trown to the inventor, who however never disclosed the secret. It is the point reached by the mercury when exposed to cold pro-duced by a mixture of snow and sait or sal ammoniac. Zero in both the Reamunu and centigrade thermometers is the freezing point; but the former marks only 80° between this and the point of bolling water while the centigrade, as the name hints, marks 100°, and the Fahrenheit 180°. Some thermometers and the Fahrenheit 1809. Some thermometers mark all three of the graduations. To reduce the Fahrenheit to Centigrade, subtract 32, and multiply by 5-9. Centigrade to Fahrenheit, multiply by 9-5 and add 32. Fahrenheit to Reaumur, subtract 32, and multiply by 4-9. Reaumur to Fahrenheit, multiply by 9-4, and add 32. Centigrade to Reaumur, multiply by 4-5. Reaumur to Centigrade, multiply by 5-4. The Reaumur is chiefly used in Germany, the Centigrade in France and by scientitic gen-Centigrade in France and by scientists gen- the period of exposure.

Common thermometers are often carelessly made, and inaccuracies are caused by want of uniformity in the caliber of the tube. To test this, move the mercury, if it do not fill the tube, up and down, and see whether it occupies the same number of degrees in different parts of the tube. A self-registering "maximum" thermometer is made by making a constriction, or narrow place, about midway of its l-ngth, which the mercury passes in expansion, but does not return unless violently shaken through. The top of the mercury thus remains at the highest point reached, and indicates the maximum. A "minimum" thermometer is made of alco-hol, which carries a small index of black glass, which is slipped by tipping to the end column. The instrument is then placed in a horizontal position, and the glass slides with the alcohol to the lowest point reached, but does not return with it upon expansion, and so marks the minimum of temperature for

#### The Dominical Letter, Etc.

"Dominical letters" have been used in the church calendar from apostolic times. Jan. 1 is A, Jan. 2 B, and so on to Jan. 7 (G), when the 8th begins again with A. The Dominical letter of a year is that which marks the first Sunday, and goes backward one place every year except leap year, which requires two places. The year 1890 comes in on Wednesplaces. The year 1800 comes in on Wednesday (A); the Dominical letter of the year is consequently E. In 1892 and all other leap years two letters will be required, as none is provided for Feb. 29, and one place back must be taken accordingly in the Sunday letter after February. The letters for the first day of each month, leap year and all, are the initials of the words in this old jingle: "At Dover Dwell George Brown, Esquire, Good Christopher Finch, and David Friar." The Dominical letter or letters for the year being known, it is easy to find ou what day of the week a given date in that week will fall. E. g., on what day will the Fourth of July come in 1890? The letter of July 1, 8, 15, 22, and 29 is G; that of the year is E (Sunday; G must consequently fall on Tuesday, and July 4 (or 11, 18, 25), must come on Friady. To find the Dominical letter of a year, add to the number of the year one-fourth of the fitter for the territure freetiens. day. To find the Dominical letter or a year, add to the number of the year one fourth of itself, rejecting fractions if any, and divide the sum by 7. For dates in the 19th century subtract the remainder, or if none from 1, and the new remainder will be the number of the letter in the alphabet. For the 18th century subtract from 7, the 17th and other dates hear to 18th channing of Gregorian calendar) back to 1582 (beginning of Gregorian calendar) back to 1582 (beginning of Gregorian) from 6, or from 13 if the remainder itself be 6. Previous to 1582 subtract from 3, or from 10 if the remainder be 8 or more. If a leapyear, the letter is only good for dates after l'eb. 29, for the reason before given; and for dates before March 1 the following letter of the alphabet must be taken.

THE last edition of Worcester's quarto dictionary defines about 116,000 words; of Webster's, 118,000 The Imperial Dictionary, issued in England, contains 130,090 defined words, and Cassell's new Encyclopædia Dictionary 180,000; the new Century Dictionary will define 280,000; Murray's New Dictionary (England), probably 300,000.

A RECENT German patent proposes the manufacture of bottles, etc., from cast iron containing 12 per cent of silicon, a com-pound that will resist the strongest acids.

THE various electrical units mostly take their names from eminent electrical scientists, Thus, the unit of capacity is the farad, from Faraday; that of quantity the coulomb, from a French inventor of the name; that of activity the watt, and of work the joule (both English); that of current, the ampere (French); that of magnetic field the gauss, and of resistthat of magnetic field the gauss, and of reass-ance the ohm (both German); that of pressure the volt, from the Italian Volta; and that of force the dyne, from the root of dynamo, "force." The ohm, or unt of resistance, is oftenest mentioned in common print. It is defined as "almost precisely equal to the resistance of a cylindrical wire of pure copper one-twentieth of an inch in diameter and 250 feet long."

THE age of majority, at which male persons may exercise full rights of citizenship, is 21 years in the United States, most of the South American republics, Great Britain and Can-American republics, oreat britain and can-ada, France, Belgium, Iraly, Portugal, and Sweden; 20 years in Switzerland and Hun-gary; 23 in Holland: 24 in Austria: 25 in Spain, Norway, Prussia, and most other German States; and 30 in Denmark. Under old Roman law majority was reached at 25. In many of our States a femal pers in is "of age" before 21, commonly at 18 years.

THE overflow of the Yang-tse-Kiang in 1888 inundated 350,000 square miles, and is computed to have cost the lives of 750,000 persons, besides hundreds of thousands who perished in the subsequent famine. This river is called "The Scourge of China." and is the worst flood-river on earth. It has overflowed fourteen times in 200 years, each time with enormous loss of life and proper time with enormous loss of life and prop-

THE average pitch of large rivers, excluding cascades, is seldom more than one foot to the mile, and sometimes but one-third of that. The pitch of the Mississippi, from Memphis to the mouth, is said to be but 4.82 traches results. inches per mile.

SUNSHINE will not penetrate a window covered with a well-beaten mixture of the whites of six eggs with an ounce of powdered gum tragacanth.

RECENT census returns: Germany, 46,855,704; Japan, 39,069.007; Persia, about 6,000,000; St. Petersburg, 8000 less than in 1881.

#### Ancient and Modern Colossi.

Colossal statues were often made by the ancients, especially the Greeks, and a few of them remain to our day. The most famous Egyptian colossus was the statue of Memnon in the plain of Thebes, supposed to be identical with the most northerly of two existing colossi (60 ft. high) on the west bank of the Nile. Among those of Greece the most celebrated was the Colossus of Rhodes, a brass statue of Apollo 70 cubits high, esteemed one of the wonders of the world, erected at the port of Rhodes by Chares 290 or 288 B. C. The statue was in ruins for nearly nine centuries, when the Saracens, taking Rhodes, sold the metal, weighing 720,900 lbs., to a Jew, about the year 653. There is no authority for the popularly received statement that it bestrode the harbor mouth, and that the Rhodian vessels could pass under its legs. Among the colossi of Phidias were the Olympian Zeus and the Athena of the Parthenon, the former 60 ft. high and the latter 40 ft. The most famous of the Roman colossi were the Jupiter of the Capitol, the Apollo of the Palatine Library, and the statue of Nero, 110 or 120 ft. high, from which the contiguous amplitheater de-

rived its name of Colosseum. Recently rockcut statues have been measured at Bamian,
on the road between Cabul and Baikh, in Central Asia, the largest being 173 ft. high and
the second 120 ft. Among modern works of
this nature are the colossus of San Carlo Borromeo, at Arona, in the Milanese territory,
of ft. in height; the statue of Hermann or
Arminius near Detmold, erected in 1875, 90 ft.
in height to the point of the upraised sword,
which itself is 24 ft. in length, the height of
the figure to the point of the helmet being 55
ft.; the statue of Germania, erected in 1883
near Rudesheim, a figure 34 ft. high, placed on
an elaborately sculptured pedestal over 81 ft.
high; and Bartholdi's statue of Liberty, presented to the United States by the French
nation, which measures 104 ft., or to the extremity of the torch in the hand of the figure
138 ft. It is erected in New York harbor, on a
pedestal of 114 ft., is constructed for a lighthouse with one of the most powerful fixed
lights in the world, and stands in all 317 ft.

#### The Age of Horses.

To tell the age of any horse, Inspect the lower jaw, of course: The sixth front tooth the tale will tell, And every doubt and fear dispel.

Two middle "nippers" you behold Before the colt is two weeks old; Before eight weeks two more will come; Eight months the "corners" cut the gum.

The outside grooves will disappear From middle two in just one year. In two years, from the second pair; In three the corners, too, are bare.

At two the middle "nippers" drop; At three the second pair can't stop: When four years old the third pair goes; At five a full new set he shows.

The deep black spots will pass from view At six years from the middle two; The second pair at seven years; At eight the spot each "corner" clears.

From middle "nippers," upper jaw, At nine the black spots will withdraw; The second pair at ten are white; Eleven finds the "corners" light.

As time goes on, the horsemen know, The oval teeth three-sided grow; They longer get, project before Till twenty, when we know no more.

#### Grammar in Epitome and Rhyme, Etc.

Three little words you often see Are articles,—a, an, and the. A noun 's the name of anything, As school or garden, hoop or swing. Adjectives tell the kind of noun, As great, small, pretty, white, or brown. Instead of nouns the pronouns stand,—His head, her face, your arm, my hand. Verbs tell something to be done,—To read, count, laugh, sing, jump, or run. How things are done the adverbs tell, As slowly, quickly, ill, or well. Conjunctions join the words together, As men and women, wind and weather. The preposition stands before The noun, as in, or through, the door. The interjection shows surprise, As Oh! how pretty: Ah! how wise. The whole are called nine parts of speech, Which reading, writing, speaking teach.

ACCORDING to the American Agriculturist, a new use has lately come up for the legs of worn-out stockings, particularly those of cashmere or hand-knit hose. In an hour or so three legs can be made into a comfortable undershirt for a quite large child. Cut them open at the seams, sew two together for the side seams, turning the top of the stocking for the bottom of the shirt, and leaving a space for the arm-hole. Fit to the neck and shoulders of the child, cut the sleeve from the third leg, sloping to fit the wrist and length, and making the top-ribbing of the stocking

for the bottom of the sleeve. Bind the neck and front slit with tape or ribbon, work a pair of button-holes and sew on the buttons, and you have a comfortable shirt with no expense. In making any sort of woolen undergarments, be sure to stitch up the seams and then open and cat or herring-bone stitch. Hems will not full up in washing, if turned up once and caught down with a row of cat-stitch. That stocking legs make pretty and inexpensive petticoats for little children is well worth remembering. One pair, finished on the bottom with crochet scallops, after sewing together and putting them to a stout cotton waist, make a warm good skirt. White, red, or gray are best for shirts, and dark-colored ones for petticoats.

The cross of Christ's crucifixion, or the Latin cross, has the transverse beam one-third of the distance from the top to the foot of the perpendicular. The Greek cross has four equal arms, held to represent the Gospel preached to the four quarters of the earth by the four Evangelists. The Maltese cross is the badge of the Knights of Malta, formed of four arrow-heads meeting at the smaller ends. The eight points of this are said to symbolize the eight points of this are said to symbolize the eight beatitudes. The emblematic cross of Calvary, at church-altars, stands on three steps, signifying Faith, Hope, and Charly The cross of Constantine is simply a mosogram of the first two Greek letters of the word Christ.

Popular Superstitions.

If in going to a house you stumble with your right foot, it is a sign that you will be welcome; if you hit your left foot, the oppo-

If you cut your nails on Sunday, you will do something before the week is over that you will be ashamed of; if you cut them on Tuesday, you "cut them for wealth"; if on Friday, you will not have the tooth-ache before the next Friday.

If a spider drops down before an unmarried lady, it is a sign her lover is soon coming to see her. If a spider is found on any article of clothing, the owner will have a new garment

clothing, the owner will have a new garmen of whatever kind it may be.

If in leaving a house you forget anything and go back after it, you will have bed luck, unless you sit down before you go out again. If you begin making a garment on Friday, the owner will die before it is worn out, unless

it is finished the same day you begin it.

If you break a needle in making a garment,
the owner will either die or be married before the garment is worn out.

If a guest takes a meal with you on Monday, you will have company to meals every day that week.

If it rains the first Sunday in the month, it will rain every Sunday in the month.

If two chairs are accidentally placed so that their backs touch, a guest will come that day. If a little pimple comes on the end of the tongue, it shows that that tongue has told a

falsehood recently.

If you spill salt, you will have a bitter quar-rel soon, which can only be averted by either burning a pinch of it or throwing a little over

the left shoulder before you speak.

If a needle, pin, or fork fall so as to stick in the floor, a guest will come from the direction

in which the upper end points.

If the inside of your right palm itches, you will soon shake hands with a stranger; if the left palm, you will receive money from some unexpected source, unless you rub it. If the bottom of the foot itches, you will go somewhere soon where you have never been

before.

If the left ear burns, some one is speaking evil of you; if the right ear, the reverse.

See a pin and pick it up, All the day you'll have good luck;

See a pin and let it lie, You'll want a pin before you die. If thirteen people sit down to a meal to-gether, one of the number will die before the

year is past If you find a horseshoe upon the road, it will bring good luck if you pick it up.
If a rabbit runs across the road in front of

you, it is an evil omen.

If a little bunch of bubbles gathers upon your tea or coffee, it will bring you a sun of money if you take it up before it reaches the side of the cup, but not otherwise.

If you see the new moon first over the right shoulder, you will have good luck all the month: the reverse, if you see it over the left shoulder. If you see it directly in front of you and have something in your hand, you will receive a present during the month. If the kettle boils dry sooner than it ought, it will rain presently.

it will rain presently.

If two people walking together allow some one to pass between them, they will have bad

If two persons wipe their hands at the same time on the two ends of a towel, it is a sign

they will never disagree.

When a baby is dressed for the first time, the clothes should be drawn on over the feet for luck.

The first time the child is taken out, it must be carried up the street, not down, so it will rise in the world.

If a child's nails are cut before it is a year old, it will grow to be a thief.

A child must fall out of bed at least once

before it is a year old or it will be a fool.

If you start on an errand and meet a crosseyed woman, you will fall in your object.

Whenever you see a red-haired woman, you

will soon see a white horse

If you write on an unruled page and your lines have a tendency to run upward toward the right, you will rise in wealth and position in life; if downward, the opposite. If a funeral procession drives fast to the grave, some other member of the family will

soon die,

If you wish to live and thrive,

Let a spider run alive.

To kill a spider in the afternoon is particu-

larly ominous of evil. If a dog howls, some one will die in the direction towards which the dog is looking at

the time

the time.

A girl born: If in January, a prudent housewife, given to melancholy, but good temper; in February, a humane and affectionate wife and tender mother; in March, a frivolous chatterbox, somewhat given to quarreling; in April, inconsistent, not very intelligent, but likely to be good-looking; in May, handsome, amiable, and likely to be happy; in June, impetuous, will marry early and be frivolous; in July, passably handsome, but with a sulky temper; in August, amiable and practical, and likely to marry rich; in September, discreet, affable, and much liked; in October, pretty and coquettish, and likely to be unhappy; in November, liberal, kind, and of a wild disposition; in December, well proportioned, fond of novelty, and extravagant.

wild disposition; in December, well propor-tioned, fond of novelity, and extravagant. Born on a Monday, fair of face; Born on a Tuesday, full of grace; Born on a Wednesday, merry and glad; Born on a Friday, loving and giving; Born on a Saturday, must work for a living; But the child that is born on the Sabbath-day is hitthe and honny, and good and cay.

Is blithe and bonny, and good and gay. He who is born on New Year's morn

Will have his own way as sure as you're born.

And he who is born on Easter morn

And he wan is born on easter morn
Shall never know care or want or harm.
Thursday has one lucky hour. He who is
born on that day just before sunrise will
escape being "sour and sad."
If you hear a ringing sound in your right
ear, you will soon learn of a wedding; if in

the left ear, news of a death will soon reach you.

The white spots on finger-nails have the following signification: Thumb, presents; fore-

lowing signification: Thumb, presents; foreinger, friends; middle finger, foes; fourth finger, lovers; little finger, journeys to go.
To give a present of a failfre, cissors, or any sharp instrument, will "cut the friendship;" to remove a ring from the finger of a friend will "break the friendship."

If four people shake hands so that their hands cross, one of them will be meaning to the most of them will be meaning to be a second or the second of them will be meaning to be a second or the second of the second or the second of t

hands cross, one of them will be married be-

fore the year is gone.

If a girl finds a four-leaved clover, she will have good luck; if she puts it over the door, the first man that comes under it will be her husband.

If you put on a garment wrong side out, you must not turn it, or you will "turn your luck"; if you do turn it, wish while turning it without speaking, and you will get your

Amusements, Puzzies, and Paradoxes.

Who Wears the Ring?—Nine persons or less are numbered in order, 1; 2, 3, etc., and another is appointed leader. One of the others, unknown to him, has placed a ring upon thumb or finger, and he is to tell who wears the ring, upon what hand and finger it is (thumb being first finger), and on what joint of the finger it is. The joint nearest the extremity is first, the right hand is 1, and left hand 2. Suppose that person No. 3 has the ring on his right hand, third finger, first joint. The figures representing these are of course ring on ms right hand, third inger, first joint. The figures representing these are of course 3131, which the leader is to find. Any one of the players or the company, knowing the place of the ring and corresponding numbers, is asked by the leader to perform this operation, for which pencil and paper will probably be necessary. Double the number of the person who has

the ring..... Add 5... Add 10.....Add the number denoting the hand..... 

Add 35
The final result will be given to the leader, who will in all cases deduct 3585, giving in this instance the required number 3131, as it will give the proper figures in all others where the right conditions have been observed. If the leader is not sure of his memory, he should have the successive operations indicated upon a card or small paper, which he can hold in the hollow of his hand.

To Find Ages.—A table for finding the age of another was given in our Year-book last year. Another entertaining method, giving also the month of birth, is as follows: Ask the other to write the number of the month in which he was born, to multiply it by 2, add 5, multiply it by 50, add his age in years, subtract 865, add 115, and state the result. There should 360, and 110, and state the result. There should be three figures in it, of which the first indicates the birth-month, the other two the age. Another method of finding the day of the week, when the year and day of the month are given, is found in an article on the Domintel Letter in this number of the Year book. ical Letter, in this number of the Year-book.

An Interesting Arithmetical Recreation.

-Have another open a book at random, select a word within the first 10 lines and within the 10th word from the end of the line, and mark the word. Now tell him to double the number of the page, multiply the product by 5, add 10, add the number of the line selected, add 5, multiply by 10, add the number of the word in the line, and finally subtract 150. The remainder will indicate in its unit column the number of the word, in tens the number of the line, and the remaining figures the number of the page.

the remaining figures the number of the page. Experiment with the Memory.—Starting with the word Washington, write down 100 words as they occur to you Let your second be that which Washington naturally suggests to you, possibly Capitol, maybe President,—take that first coming into your mind. So let the third word be suggested by the second, the fourth by the third, and so on. Be careful that the third word is not suggested to you he but the first and second. Then the to you by both the first and second. Drop the first entirely, and let your mind go on from the second alone to the third. Having written this list of words, you will be furnishing yourself with a cheap but useful mirror of your mind. If you are able to use it, you may discover some very serious defects in your mental processes, perhaps that you are using superficial principles quite too much to the

neglect of more important laws of mind. You will thus be led to avoid certain linkings, and to encourage others of a more philosophical

PARADOXES,
A train starts daily from San Francisco to New York, and one daily from New York to San Francisco, the journey lasting seven days. How many trains will a traveler meet in journeying from San Francisco to New York' You say seven promptly, but that is not the answer.

A man walks round a pole on top of which is a monkey. As the man moves the monkey turns round so as still to keep face to face with the man. When the man has gone round the pole, has or has he not gone round the monkey?

Suppose three snakes, each of which is swallowing another by the tail, so that the three form a circle,—then as the swallowing process continues the circle evidently grows smaller and smaller. Now, if they thus continue to swallow each other, what will eventu-

"All Cretans are liars." But he who says this is himself a Cretan. Therefore he lies, But he who says and the Cretans are not liars. Then he tells the truth, and the Cretans do lie. So he lies, Then he tells

LORD CHESTERFIELD'S FAMOUS RIDDLE.

1. The noblest object in the works of art. 2. The brightest scenes which nature can impart.

 The well-known signal in a time of peace. 4. The point essential in a tenant's lease

5. A farmer's comfort as he drives his plow. 6. A soldier's duty and a lover's vow.

A contract made before the nuptial tie.
 A blessing riches never can supply.

9. A spot that adds new charms to pretty

faces. An engine seen in fundamental places. 11. A planet seen between the earth and sun.

12. A prize which merit never yet has won.
13. A loss which prudence seldom can retrieve.

14. The death of Judas and the fall of Eve.

15. A part between the ankle and the knee.
16. A Papist's toast and a physician's fee.
17. A wife's ambitton and a parson's dues.
18. A miser's idol and the badge of Jews. If now your happy genius can divine The correspondent word in every line,

By the first letter may be plainly found
An ancient city which is much renowned.

Temples—with gilded domes and spires.
Heavens—with fair moon and astral fires.
Ensigns—high o'er the bannered host.
Seals—that lords and tenants trust.
Fraction, that nows found agreet.

Expectation—that pays for toil and sweat. 6. Vows-debar the lover's vain regret Engagements made with rings of finest

gold. Nobility—that's neither bought nor sold.

9. Home—that sweetens man's and maiden's charms.

10. Iron—whose tools build house and barns.
11. Luna—The moon's bright face full-orbed.
12. Life—no price can buy, no skill has forged. 13. Esteem-once lost, not easy to be won

14. Devil-whose wiles not even Eve could

 Calves—that do not eat, or breathe, or cry.
16. Ingots—that in the store will all things

17. Tithes—the tenth that priests received of old.

18. Yeliow-boys—that Jews call gold. THE SEVEN-HILLED CITY.

#### Foods for the Sick.

[Corrected for the YEAR-BOOK by Henry F. Lyster, M. D., of Detroit, Professor in the Michigan University Medical School and Member of the State Board of Health.]

The meat-jure foods as usually prepared are little better than pure stimulants. They are not properly foods, and do not supply nutriment to the body. An animal will starve just about as soon on beef-tes alone as it would without it. In the preparation of beet-teas, soups, and broth for the sick, some food must be incorporated with it. The recent peptonized beef-extracts are more valuable as foods. Milk is the best of all foods for the sick.

BEEF-TEA.—In the preparation of beef-tea, BERTHA.—In the preparation of beef-tee, according to the following recipe, the abumen of the tissue is preserved in a fluid form and is easily assimilated, forming a true food: Take a pound of fresh beef off the round, and scorch it quickly and very slightly on one side before the coals, cut it up as fine as hash, put it in an earthen bowl and pour on half a pint of tepid water (not over 90° F.), and let it stand for two hours in summer temperature near for two hours in summer temperature near the stove, covered by a saucer, on the kitchen mantelpiece. Then strain and squeeze through clean linen, take the expressed juice and put it in a thick pie-dish on the back of the stove, and stir steadily for five or ten minutes. Never let it get warmer than 150°. Try the temper-ature by the finger. When it takes a darker aure by the ringer. When it takes a darker hue, as butternut or walnut shade, it is done. Season with a little salt. If you heat it up to 190°, all the albumen will coagulate, and it will be spoiled as a food. You may depend upon the deepening of the color. This beefuce at a cooked flavor and is of a port-wine color. It is a realizable food. It is a valuable food.

MILE PORRIDGE.—Two cups of best oatmeal, two cups of water, two cups of milk. Soak the oatmeal over night in the water; strain in the morning, and boil the water half an hour. Put in the milk with a little salt, boil up well, and serve. Eat warm, with or without powdered sugar. In very warm weather the oat meal may sour by morning, and there is a dessicated oatmeal now sold which can be

dessicated catmeal now sold which can be used without soaking over night.

SOFT-BOILED EGGS.—Pour boiling water on a fresh egg in a tea-cup, cover with a saucer, and let it stand for five minutes or more. If two eggs are to be cooked, a small bowl may be used. This plan prevents the coagulation of the white, and is very delicate.

SOFT TOAST.—Some invalids like this very much indeed, and nearly all do when it is nicely made. Toast well, but not too brown, accurate of this places of bread your three or me.

a couple of thin slices of bread; put them on a warm plate and pour over boiling water; cover quickly with another plate of the same size, and drain the water off; remove the upper plate, butter the toast, put it in the oven one minute, and then cover again with a hot plate and serve at once. Toast, however, has

fately been looked upon as rather indigestible,

and is no longer prescribed as a light food.
CHICKEN JELLY.—Half a raw chicken, pounded with a mallet, bones and meat together, plenty of cold water to cover it well—about a quart. Heat slowly in a covered vessel, and let it simmer until the meat is in white rags and the liquid reduced one-balf. Strain and press first through a colaris in white rags and the liquid reduced one-half. Strain and press, first through a colan-der, then through a coarse cloth. Salt to taste, and pepper if you think best; return to the fire, and simmer five minutes longer. Skim when cool. Give to the patient cold— just from the foe—with unleavened wafers. Keep on the ice. This recipe should be used with the caution that long cooking of meet or with the caution that long cooking of meat or vegetables changes the normal albumen into

complex bodies, which are not easily digested.

Are we consider the constant of the constant o two heaping teaspoonfuls best Bermuda arrow-root, one teaspoonful lemon-juice, and two teaspoonfuls white sugar. Wet the arrowroot in a little cold water, and rub smooth.
Then stir into the hot water, which should be
on the fire and actually bolling at the time,
with the sugar already melted into it. Stir
until clear, boiling steadily all the while, and add the lemon-juice. Wet a cup in cold water and pour in the jelly to form. Eat cold with sugar and cream, flavored with rosewater if

you like.—Successful Housekeeper.
Soup for an Invalid.—Cut in small pieces one pound of beef or mutton, or a part of each; boil it gently in two quarts of water, take off the scum, and when reduced to a pint, strain it. Season with a little salt, and take a teacupful at a time.—Ibid.

GRUEL—Gruel can be made from oatmeal, wheat flour, or cornmeal. In all cases these things should be first mixed smoothly, with a chings should be first mixed smoothly, with a little cold water, and afterwards more water added; boil, and season to taste. Two tablespoonfuls of any of them is enough to make one pint, when boiled. A few raisins boiled in gruel is an improvement.—Presbyterian Cook-book.

HOT DRINK .- Equal parts of fresh milk and . bolling water, or an egg and a half-teaspoon of sugar beaten till very light, stirred well with a pint of boiling water and salted, make an excellent drink in cases of exhaustion, as they are quickly absorbed with little digestive

APPLE WATER.—Slice a half-dozen juicy, sour apples, add a teaspoon of sugar, pour in a quart of boiling water, cover closely till cold, and strain. This drink is slightly laxative in its effects. - Weeks's Text-Book of Nursing.

Hints upon Nursing.

The nurse who takes the best care of her own health will be best able to care for her patient. Insist upon due allowance of rest,

patient. Insist upon due anomalos of 1500, food, and exercise, and proper time for care of your own person and for meals.

Observe absolute fidelity to the doctor's orders, even if the necessity of the prescribed measures is not apparent. A well-disciplined measures is not apparent. A well-disciplined nurse never makes a diagnosis and never prescribes. But she should know the effects medicines given are intended to produce, and when their continuance is contra-indicated. The utmost candor and truthfulness are due to the doctor.

Keep the patient with a clean skin, clean chees, clean air, and clean surroundings generally, and much will be done toward satisfy-

ing the patient's needs. Your own person should be an example of cleanliness.

Dress should be fresh and tidy, of quiet colors, and with immaculate cap and aprons if such are worn. The hands especially should be well cared for, kept smooth and warm, with nails short and well brushed.

Cultivate a touch at once firm and gentle,

light and steady.

Never use force when persuasion will avail, even with a delirious patient, and do not make an unnecessary display of authority.

Make allowance for the close connection between mental and physical states. You will scarcely mind what a sick person says, so long as you are sure he has no ground of dis-satisfaction.—Weeks's Text-Book of Nursing.

#### A Few Plain Recipes for Cooking. [Prepared by Mrs. Kate Brearley Ford.]

Potato Sour.—A quart of peeled and sliced potatoes, the slices very thin; about as much smilk. Let the potatoes cook in a little water till they begin to break in pieces; meanwhile have the milk scalding on the back of the stove. Add the milk to the potatoes, with salt, pepper, and a little butter, or better cream, and let all boil for an instant, when the soun is done. It is doubtles meanwhile. soup is done. It is doubtless more wholesome if the potatoes are sliced and stand a while in water before being put to cook. Of course they must be cooked in other water from that in which they are soaked.

Tomato Sour.—A pint of tomatoes thoroughly cooked in their own juice and put through a colander; the same measure of boiling water and rich sweet milk. Put the tomatoes in a stew-kettle, and when they have come to a boil add a teaspoonful of roda, and afterward the boiling water. Have the milk meanwhile slowly heating, and add it to the tomato and water. Season to taste with butter, salt, and pepper, and dish at once in hot bowls. A few slices of bread cut very thin and toasted slowly will give relish to

the soup.

CORNMEAL BREAD.—Use the new kind of cornmeal, called the "New Process Cornmeal," which is fine as flour. First measure into a stirring bowl one cup of cornmeal and two cups of sifted flour. Into these rub one teaspoonful of salt, nearly one cup of granu-lated sugar, one spoonful of lard or butter, and two teaspoonfuls of baking powder. Now into a quart bowl put the whites of two eggs, into another bowl the yolks of the same. Beat the yolks well, and add to them a cup of milk; stir together, and then stir in the other mixed ingredients, adding as much more milk as is required to make a thin batter. Now bring the whites to a stiff froth, and add to the rest, beat thoroughly, and it is ready for a well-buttered square tin, eight inches by twelve. It takes nearly an hour to

JOHNNY-CARE -One cup of cornmeal, one cup of white flour, one cup of sweet milk, one egg, four tablespoonfuls of melted butter, two tablespoonfuls of sugar, and two tea-

spoonfuls of baking powder.

STRAWBERRY SHORT-CAKE.—One pint of flour sifted, with one half-teaspoon of soda and one teaspoon of cream of tartar; one half-teaspoon of salt, one half-teacup of sweet milk, and five tablespoons of butter. Mix soft, and roll about as thick as for biscuits. Bake in a hot oven, and when done open and spread with butter and mashed berries. whole fruit on the top, and serve with sugar and sweet cream.

YEAST CAKE .- One cup of soft yeast, one cup of flour, one cup of sugar, one-third cup of butter,—and no more,—one egg, one tea-spoonful of soda, one half-teaspoonful of spices, and one cup of seeded raisins dredged in flour. Let it rise, and bake as you would bread. Powdered sugar on the top or a thin frosting adds to its excellence. Be sure that the loaf is entirely done before removing from

the oven.

FRIED CAKES.—One cup of sugar, one cup of thick sour buttermilk, one half-cup of thick sour cream. Salt and soda as required and cinnamon if desired, sufficient flour to make a soft dough. No eggs are required. Great care should be taken in frying and draining after they are done before putting away. A stone crock in a cool place will keep them

GINGER SNAPS .- One cup of New Orleans molasses, one cup of sugar, one scant cup of

butter, one egg, one tablespoonful of soda, one tablespoonful of vinegar, seven cups of flour, and ginger to please the taste. Roll very soft and thin, and bake with care.

CREAM PIE.—One cup white sugar, two-

thirds cup of cream, two eggs, two cups flour, one teaspoonful cream of tartar, half-teaspoonful sods. This will make seven thin cakes, between which spread the cream. For the cream take half a pint of milk, put into a basin of hot water on the stove, beat one egg with white sugar enough to sweeten, and add two teaspoonfuls corn starch; stir this into the milk when hot, and flavor with vanilla and cinnamon. When cool put between the cakes.

BAKED INDIAN PUDDING .- Three pints of milk, one egg, one half-teacup of sugar, two tablespoons of butter, four tablespoons of Indian meal, one half-teaspoon of salt, and a little cinnamon for flavoring if desired. Boil half the milk, and add the meal. Beat the egg, and stir with the melted butter, salt, and cinnamon into the cold milk. Now mix the two compounds, and bake about two hours in

a slow oven.

Bread Pudding.—Pour boiling water on a pint of dry bread crumbs; melt with it one tablespoonful of butter. When soft, mix in two beaten eggs, one pint or more of fruit, stewed or fresh; sweeten to taste. It is better without spices. Bake 20 minutes, and eat

with or without cream.

TAPIOCA PUDDING.—A quarter of a pound of TAPIOCA PUBLICA.—A quarter of a pound of tapioca; soak over night; in the morning pour off, and put in one-and-a-quarter quarts of boiling water; sweeten and flavor to taste. Take six or eight apples, tart ones, pare, core, and stand them in a baking dish; fill the middle with sugar and a little cinnamon, pour the tapioca over, and bake until the apples are done. Eat cold with cream. If preferred the apples are beared, cored, and cut smallish; put into the dish, and pour over the tapioca, baking until done. If you want to make it in a hurry, instead of soaking over night, pour boiling water on in the morning and eit until boiling water on in the morning, and stir until it looks like thin starch. Grind your tapioca in the coffee-mill, and you will find it cooks more evenly and quickly.

Lemon Sauce.—Mix a tablespoonful of corn-

starch with a quarter of a cupful of water; stir this mixture into a cupful of boiling water and boil for two minutes, then add the juice and rind of a lemon and a cupful of sugar, and cook three minutes longer. Beat an egg very light, and pour the bolling mixture over it. Return to the fire and cook a minute longer, stirring all the while.

APPLE DUMPLING.—Make the crust exactly like baking powder biscuit, except that it should be mixed to a stiffer dough. Have apples sliced as for pies. Do not make the crust too thick. Cut a circular piece, in the middle of which place the apples with sugar and a little butter, and gather the crust around the filling, pinching it tightly together. Prepare as many as the size of your family requires, and place them in a roomy pudding dish or dripping-pan. Over all pour water. Placed in a hot oven, the sugar and butter will soon cook out into the water, when the dumplings must be basted. Repeat this operation frequently, adding to the quantity of water by water from the boiling tea-kettle if necessary. When they are done, turn off the juice for a sauce.

CHERRY ROLL.-Make a dough as for baking nowder biscuits. A good way is four exflour, four teaspoons baking powder, tablespoon lard, salt; rub all together, w

with sweet milk, roll out on the moulding board, spread with pitted cherries, roll up in a round roll, steam one hour; eat with a boiled sauce.

CHOCOLATE CREAMS.—The white of one egg well beaten with the same quantity of water; one pound of pulverized sugar. Mix well, flayor with vanilla to suit the taste, shape into balls, and dip each into melted chocolate.

balls, and dip each into metred chocouste.

WAFFLES.—Take one pint of buttermilk, one
teaspoonful of sods, one tablespoonful of
melted butter, one teacup of flour, the yolks
of four eggs and a small pinch of salt; beat
the whites separately to a stiff froth, and add
them the last thing. Have the waffle tins well greased and very hot, pour in the batter, and bake brown. When taken up spread with

butter and keep warm.

Green Corn Canned.—Do not score the corn, but with a very sharp knife cut the corn twice; by this is meant cut off a thin slice of twice; by this is meant cut off a thin slice of the kernels, then a thicker one, and lastly scrape the cob well. After putting a little salt with the corn, put it into glass-topped, glass preserving jurs, pounding it down to make them as full as possible. When full put on the rubber rings and screw down the tops as tightly as possible. Put cloths into the bottom of a wash-boiler to keep the jars from standing on the metal. Stand one layer of jars in the boiler and nearly cover them with cold water, putting in enough to "swish" over the tops as it boils. Let the water come slowly to a boil, and then boil hard for four hours, adding boiling water as it boils away. Take the jars out once an hour and tighten the tops. Also tighten them again when the corn is done. If you find a cover in the least loose when the cans are cold, the corn in it will not keep. When the can is opened in the winter it only needs to be heated and seasoned, and if so treated will be very tender.

GREEN CORN STEAMED .- Cut from the cob, and put in a basin, which place in a steamer and steam about two hours; then add salt, pepper, butter, and enough sweet cream to make it of the consistency of a thin batter. Of course the best kinds of corn, not too young or too old, will be the most palatable, no mat-

ter how it is cooked.

BAKED APPLES.—Wash good tart apples, BARED APPLES.—was good Lart apples, peel if preferred, cut out the core, and place in a porcelain pudding-dish. Put a little butter and sugar in each apple, and pour a little boiling water around them. Bake carefully, basting if the apples are inclined to become

too brown.

There are many nice ways of cooking apples for dessert or tea. One favorite way is to remove the cores from large, tart apples that will cook quickly, peel them after coring, and put them on a plate which will fit into a but one layer of apples can be prepared at a time. When steamed through and thoroughly cooked but not broken, remove from the steamer and set away to cool. When cool sift sugar over them, and cover with a frost-ing made from the whites of two eggs and two-thirds of a cup of sugar, flavored with a little lemon. Put in a quick oven two or three minutes, and brown very lightly.

BAKED PEARS.-Fill an earthen pot with whole pears, over which sprinkle a teacup of sugar, and pour about the same quantity of water; cover and bake slowly three or four hours. They are delicious.

RASPBERRY SHRUB. - Place a quantity of berreast series, asy five or eight quarts, in a jar, pouring over them enough best quality cider vinegar to cover the berries. They are allowed to stand two days and then put through a jellyleg. The resulting juice and vinegar is

poured over another lot of berries as before, as many as the juice will cover, which is about double the quantity used at first. These also double the quantity used at first. These also stand two days and are then put through the jelly-bag, an equal quantity of sugar added, quart for quart, and boiled 20 minutes to an hour, till the julce pours from a spoon with a ropy consistency. Then put up in jars the same as in canning ordinary fruit. It will keep the year through. When desired for use prepare a mild lemonade, cold, and add a teacupful of the raspherry product to the pitch. cupful of the raspberry product to the pitcherful of lemonade.

CHICKEN CROQUETTES .- One large chicken, or two medium-sized ones, chopped fine. Put two ounces of butter in a pan, with two wellfilled tablespoons of flour, one pint cream, and then season with sait, pepper, and herbs to your taste. Let this mixture boil until it reaches the consistency of thick custard. Take off the fire, then stir into it as much of the chopped meat as is requisite to make thick enough so that when cold it can be formed into balls. Also stir in the yolk of one When cold enough make in croquettes and dip each one in a batter made of one egg, then roll in fine bread crumbs and fry in hot butter.

BEEF LOAF.—Beef three pounds, hashed at the butcher's, one cup of rolled butter-crack-ers, one tablespoonful each of salt and pepper, one half-cup of butter. Mix thoroughly, press into a deep pudding-dish or pan, bake three hours. Over the top place bits of butter, and a few crackers if desired. Good always, correctedly for philder's lunch baskets.

especially for children's lunch baskets.
Cold Mears.—Chop the meat fine; season with salt, pepper, a little onion or tomato catchup. Fill a tin bread pan two-thirds full; cover it over with mashed potatoes which have been salted and have milk in them; lay bits of butter over the top and set it into a Dutch or stove-oven for 15 or 20 minutes.

CABBAGE SALAD.—Beat four eggs, and add one teacup of vinegar and one half-cup of butter. Scald these together, stirring all the while to make smooth. Let this get cold while the cabbage, etc., are prepared. Chop very fine one small head of cabbage and two bunches of celery, add one teaspoon of black pepper and the same amount of salt, one tablespoon of made mustard, and two tablespoons of sugar. After thoroughly stirring these together, mix with them two tablespoons of salad oil and stir well, after which add the dressing, which has now become cool, and again mix with patience and care. To add to the looks, two or three hard-boiled eggs may be sliced and placed over the top; but this is not necessary

An appetizing salmon salad is made by fill-ing the salad bowl with alternate layers of finely chopped fresh cabbage and of salmon picked into very small pieces. Pour over it a

rich dressing.

Fish may be scaled much easier by first dipping in boiling water about a minute. Salt fish are quickest and best freshened by soaking in sour milk.

A MAN buys something for a dollar, and proceeds to pay for it at the rate of 50 cents the first day, 25 cents the second, 1214 cents the next, and so on, paying each day half the amount paid the day before. Supposing him to be furnished with coins of small value so as to be able to pay fractions of a cent, how long would it take him to pay the dollar?

STOP a dog-fight, or loosen the hold of a dog, by putting snuff or pepper to his nose. He can't sneeze and fight or bite at the same time.

#### Wit and Wisdom.

Why is a traveling merchant like a fish? Because he carries his scales with him.

"Ah, Jones, where away so fast this morn-g?" "I'm off for the whaling grounds." He was the district schoolmaster on his way to the school-house.

Wife: "George, do the American Indians always travel in single file?" Husband: "I never saw but one, and he did."
The man who boasted that he was as "regular as the sun" forgot that that luming the same of the nary rises only twice in the year at the same time.

Some people appear to be surprised because Cleopatra was a little woman. It doesn't re-quire a giant to make a fool of a man.

"Joe, your wife looks as fresh as a morning glory." "Bill, I wish she was a morning glory." "Why so, Joe?" "Because she'd shut up at night."

It is well enough to say that thirteen is an unlucky number, but this country started in business with thirteen States, and seems to be

ousniess with holding her own.
"Pa," said a little boy, "what is an absolute monarchy?" "I can't explain it, my son, so that you can comprehend it. Wait until you get married, my son, and then you'll know."

Minister (making a call)—"And do you always do as your mamma tells you to, 'Flossie?" Flossie (emphatically)—"I guess I

"Johnny, I have discovered that you have taken more maple sugar than I gave you."
"Yes, grandma; I've been making believe there was another little boy spending the day with me."

A cat's eyes are said to be largest at mid-night. We never made any examination, but we are positive that its voice is about seven-teen times larger at that hour than at any

other period during the twenty-four.

An independent is a man who leaves the other party to join our party, A renegade is a man who leaves our party to join the other. An offensive partisan is a man who belongs to

the other party and sticks to it.

the other party and stress to it.

A bishop, reproving his delinquent page, said, "Wretched boy, who is it that sees and hears all we do, and before whom even I am but a crushed worm?" The boy replied, "The missus, my lord." His lordship said this was not the right answer.

A Quincy teacher recently in giving primary language lessons wrote upon the blackboard the words "Ingrain," "Brussels," "Wilton," and requested her pupils to write each a sentence containing one of these words. One boy displayed his ingenuity as follows: "A hedgehog has Brussels on his back.

The rooster would be a much more popular

bird if he could only be induced to feel that there is no real, vital necessity for his report-ing his whereabouts between midnight and three A. M. We know that he is at home, in the bosom of his family So are we, but we don't get up in the night to brag about it. A certain preacher, discoursing upon Bun-

yan and his works, caused a titter among his hearers by exclaiming, "In these days, my brethren, we want more Bunyans," Another clergyman, pleading earnestly with his parish-ioners for the construction of a cemetery for their parish, asked them to consider the "deplorable condition of 30,000 Christian Englishmen living without Christian burial." Still more curious was this clerical slip: A gentle-man said to the minister, "When do you ex-pect to see Deacon S. again" "Never," said the reverend gentleman solemnly; "the deacon is in heaven.

Strength is born in the deep silence of long-suffering hearts, not amidst joy .- Mrs.

Our grand business is not to see what lies dimly at a distance, but what lies clearly at hand.—Carlyle.

A sound discretion is not so much indicated by never making a mistake as by never repeating it .- Bovee.

Cheerfulness is an excellent wearing quality. It has been called the fair weather of the

heart .- Smiles.

They who are most weary of life, and yet are most unwilling to die, are such who have lived to no purpose, who have rather breathed than lived.—Clarendon.

If we can not understand all the truth that is presented to us, our duty is to make use of what we can understand. It is thus that the way will open up to us and that we will grow into a wider and truer knowledge.—Anon.

It is the self-absorption that carves the wrinkles in the face and streaks the hair with gray. Kindly thought and labor for others dependent and beloved,—the living out of and not in the petty round of personal and individual interests,-keeps heart and energies fresh.-Anon

The path of duty leads to the castle of happiness.—Anon.

Half our days we spend in the shadow of the earth.—Old writer

Be not simply good: be good for something.—Thoreau

The way not to have any more rascals is not to grow any more rascals.—Dr. Holland.
Conduct is three-fourths of life.—Matthew Arnold.The normal man is two-thirds will.-Scho-

penhauer.

Politeness is benevolence in trifles.-Macaulay.

So nigh is grandeur to our dust,
So near is God to man,
When Duty whispers low, "Thou must,"
The youth replies, "I can."—Anon.
"Alas! it is not when we sleep soft and

"Alas! It is not when we sieep son and wake merrily ourselves that we think on the other people's sufferings. Our hearts are waxed light within us then, and we are for righting our ain wrongs and fighting our ain battles. But when the hour of trouble comes, and when the hour of the comes that comes to high and low, then it is na what we hase dune for oursells, but what we hase dune for others, that we think on maist pleasantly."—Jeanie Deans, in "The Heart of Mid-Lothian."

They only are poor who feel poor, and poverty consists in feeling poor.—Emerson.

It is a good sign that a man is capable of

being ashamed -Talmud.

If there be one thing upon this earth that mankind love and admire better than another, it is a brave man,-it is a man who dares to look the devil in the face and tell him he is a devil .- Garfield.

An ounce of mother is worth a found of clergy.—Scotch.

Affection unrequited dies from starvation .-

Unflinching labor conquers everything.-Rosenkranz.

Nothing is more fatal to intellectual and moral growth than a devotion to low and sensational literary works.--Johonnot.

The first condition of mental growth is that we keep our minds open to new impressions, and the longer we retain something of the child's susceptibility to new impressions, the longer shall we centinue to grow.— Sully.

# The United States.

#### The Federal Government.

EXECUTIVE DEPARTMENT. President—Benjamin Harrison, of Indiana. Salary, \$50,000 a year.

Vice-President—LEVI P. MOBTON, of New

Vice-President—Levi P. Morton, of New York. Salary, \$8000. Secretary of State—James G. Blaine, of Maine. Salary, \$8000. Secretary of the Treasury—William Windon, of Minnesota. Salary, \$8000. Secretary of War—Reddield Proctor, of Vermont. Salary, \$8000. Secretary of the Navy—Benjamin F. Tracy, of New York. Salary. \$8000.

of New York. Salary, \$8000.

Secretary of the Interior—John W. Noble, of Missouri. Salary, \$8000.

Of Aussour:
Secretary of Agriculture—Jereman
Rusk, of Wisconsin. Salary, \$8000.
Postmaster-General—John Wanamaker, of
Pennsylvania. Salary, \$8000.
Attorney-General—W. H. H. MILLER, of InSchary. \$8000.

diana. Salary, \$8000.
Commissioner of the General Land Office. Commissioner of the General Land Office—
LEWIS A. GROFF, of Nebraska. Salary, \$4000.
Commissioner of Patents—Charles E.
Mitchell, of Connecticut. Salary, \$5000.
Commissioner of Pensions—Green B.
RAUM, of Illinois. Salary, \$5000.
Commissioner of Indian Affairs.—Thomas
J. Morgan, of Rhode Island. Salary, \$4000.
Commissioner of Education—WM. T.

Commissioner of Education — Wm. Harris, of Massachusetts. Salary, \$3000. D.

HARRIS, Of Massachusetts. Salary, \$3000.
Commissioner of Labor—Carroll
Wright, of Massachusetts. Salary, \$5000.
Commissioner of Railroads—Horace
Taylor, of Wisconsin. Salary, \$4500.
Superintendent of Census—Robert
Porter, of New York. Salary, \$6000.
Director Geological Survey—John
Powell, of Illinois. Salary. \$6000

Census - ROBERT P.

Powell, of Illinois. Salary, \$6000.

rowell, of inhois. Saiary, \$0000.

Civil Service Commissioners—Charles Lyman, of Conn., President; Theo. Roosevelt, of New York; Hugh S. Trompson, of S. C. Saiary, \$3500. Chief Examiner—Wm. H. Webster, of Conn.; \$3000. Secretary—John T. Doyle, of New York; \$2,000.

U. S. SUPREME COURT. Chief Justice—MELVILLE W. FULLER, of Illinois, appointed 1888. Salary, \$10,500. Eight Associate Justices, at \$10,000; Samuel F. Miller, Iowa, appointed 1882; Stephen J. Field, California, 1863; Joseph P. Bradley, New Jersey, 1870; John M. Harlan, Kentucky, 1877; Horace Gray, Massachusetts, 1881; Samuel Blatchford, New York, 1882; Lucius Q. C. Lamar, Mississippi, 1888; David J. Brewer, Kansas, 1889.

U. S. ARMY.

The maximum force allowed the army by existing law is 2155 commissioned officers and

25,000 enlisted men.]

Major-Generals—John M. Schofield (commander). Oliver O. Howard, George Crook.

Pay, \$7500 each.

Brigadier-Generals—Nelson A. Miles, David S. Stanley, John Gibbon, T. H. Ruger, Wesley Merritt, John R. Brooke. Pay, \$5500 each All of the officers above named receive an

allowance for quarters, fuel, and forage, in addition to their pay proper.

U. S. NAVY. Admiral—David D. Porter. Pay, \$13,000. Vic:-Admiral — Stephen Rowan, retired. Pay, \$9000.

Rear-Admirals—James E. Jouett, Lewis A. Kimberly, Bancroft Gherardi, Daniel L.

Braine, George E. Belknap, David B. Harmony, Pay, \$6000.

mony. Pay, \$6000.

Ten Commodores on the active list receive \$5000 each; Captains, \$4500 each; Commanders, \$3500 each.

THE SENATE-FIFTY-FIRST CONGRESS. President—Levi P. Morton.
Chaplain—Rev. J. G. Butler, D. D.
Secretary—Gen Anson G. McCook. Secretary—Gen Anson G. McCook.
Chief Clerk—Charles W. Johnson.
Sergeant-at-Arms—WM. P. Canaday.
Executive Clerk—James R. Young.
Senators, at \$5000 each and mileage:
ALABAMA.—James L. Pugh, D., term expires
2014. John T. Morren, D. 1895.

ARBANSAS.—James K. Jones, D., 1891; James

H. Berry, D., 1895.

California.—Leland Stanford, R., 1891; George Hearst, D., 1893. Colorado.—Henry M. Teller, R., 1891; E. O.

Wolcott, R., 1895. CONNECTICUT.-Orville H. Platt, R., 1891; Joseph R. Hawley, R. 1893.

DELAWARE.—George Gray, D., 1893; Anthony Higgins, R., 1895. FLORIDA.—Wilkinson Call, D., 1891; Samuel

Pasco, D., 1893. Georgia.—Joseph E. Brown, D., 1891;

GEORGIA.—Joseph E. Brown, D., 1891; Alfred H. Colquitt, D., 1895. ILLINOIS.—Charles B. Farwell, R., 1891; Shelby M. Cullom, R., 1895. INDIANA.—Daniel W. Voorhees, D., 1891; David Turple, D., 1898. Iowa.—Wm. B. Allison, R., 1891; James F.

Nilson, R., 1895.

KANSAS.—John J. Ingalls, R., 1891; P. B.
Plumb, R., 1895.

KENTUCKY.—J. S. C. Blackburn, D., 1891;

James B. Beck, D., 1895.

LOUISIANA.—James B. Eustis, D., 1891; R. L.

Gibson, D., 1895.

MAINE.,—Eugene Hale, R., 1893; William P.

Frye, R., 1895.

MARYLAND.--E. K. Wilson, D., 1891; A. P. Gorman, D., 1893.

Massachuserts.—Henry L. Dawes, R., 1893; George F. Hoar, R., 1895. Michigan.—F. B. Stockbridge, R., 1893; James McWillan, R., 1895. Minnesora.—C. K. Davis, R., 1893; W. D.

Washburn, R., 1895.

MISSISSIPPI.—James Z. George, D., 1893; E. C. Walthall, D., 1895. Missouri.—George G. Vest, D., 1891; F. M. Cockrell, D., 1893.

MONTANA

NEBRASKA.—A. S Paddock, R., 1893; Charles F. Manderson, R., 1895. NEVADA.—John P. Jones, R., 1891; W. M. Stewart, R., 1893.

NEW HAMPSHIRE.—Henry W. Blair, R., 1891;

NEW HAMPSHIRE.—Henry W. Dian, R., 1991, Wm. E. Chandler. R., 1895. NEW JERSEY.—Rufus Blodgett, D., 1893; John R. McPherson, D., 1895. NEW YORK.—Wm. M. Evarts, R., 1891;

Frank Hiscock, R., 1893.

Frank нівсоск. К., 1999.

North Caroliña.—Zebulon B. Vance, D., 1891; M. W. Ransom, D., 1895.

North Dakrota.—Gilbert A. Pierce, R., 1891; Lyman R. Casey, R., 1893.

OHIO.—Henry B. Payne, D., 1891; John

Sherman, R., 1893. Oragon.—John H. Mitchell, R., 1891; Joseph N. Dolph, R., 1895. J. PENNSYLVANIA. Donald Cameron, R.,

1891; M. S. Quay, R., 1898.

RHODE ISLAND.-Nelson W. Aldrich, R., 1893; Jonathan Chace, R., 1895. SOUTH CAROLINA.—Wade Hampton, SOUTH CAROLINA.—Wad 1891; M. C. Butler, D., 1895.

1891; M. C. Butter, D., 1893.
SOUTH DAROTA.—G. C. Moody, R., 1891;
R. F. Pettigrew, R., 1893.
TENNESSEE.—Wm. B. Bate, D., 1893; Isham
G. Harris, D., 1895.
TEXAS.—John H. Reagan, D., 1893; Richard
Coke, D., 1895.

VERMONT.—Justin 8. Morrill, R., 1891; George F. Edmunds, R., 1893. VIRGINIA.—John W. Daniel, D., 1893; John S. Barbour, D., 1895. WASHINGTON.—Watson C. Squire, R., 1891;

John B. Allen, R., 1893. West Virginia.—Charles J. Faulkner, D.,

1893; John E. Kenna, D., 1895. Wisconsin.—John C. Spooner, R., Philetus Sawyer, D., 1893. Dem., 37; Rep., 45. Rep. majority, 8. Spooner, R., 1891;

#### HOUSE OF REPRESENTATIVES.

[Salary of members, \$5000 and mileage; of Speaker, \$8000.]

Speaker, THOMAS B. REED, of Maine.

Clerk—EDW. MCPHERSON, of Pennsylvania.

Sergeant-at-Arms—A. J. Holmes, of Iowa.

Chaplain—Rev. WM. H. MILBURN, D. D.

Doorkeeper—Chas. W. Adams, of Maryland.

Postmaster—J. A. WHEAT, of Wisconsin.

Geo. E. Adams, R. Albert J. Hopkins, R. Robt. R. Hitt, R. Alabama Richard H. Clarke, D. Hilary A. Herbert, D. William C. Oates, D. Louis W. Turpin, D. James E. Cobb, D. T. J. Henderson, R. Chas. A. Hill, R. Lewis E. Payson, R. John H. Bankhead, D. P. S. Post, R. Wm. H. Gest, R. Scott Wike, D. William H. Forney, D. Joseph Wheeler, D. Wm. M. Springer, D. J. H. Rowell, R.

Arkansas. W. H. Cate, D. C. R. Breckinridge, D. Thomas C. McRae, D. John H. Rogers, D. Samuel W. Peel, D. Joseph G. Cannon, R. Geo. W. Fithian, D. Edward Lane, D. Wm. S. Forman, D. James R. Williams, D. Geo. W. Smith, R.

California. John J. DeHaven, R. Marion Biggs, D.
Joseph McKenna, R.
W. W. Morrow, R. Thos. J. Clunie, D. Wm. Vandever, R.

Colorado. Hosea Townsend, R.

Connecticut.Wm. E. Simonds, R. W. F. Willcox, D. Chas. A. Russell, R. Frederick Miles, R.

Delaware. J. B. Pennington, D.

Florida. R. H. M. Davidson, D. Robert Bullock, D.

Georgia. Rufus D. Lester, D. Henry G. Turner, D. Chas. F. Crisp, D. Thos. W. Grimes, D. John D. Stewart, D.

Frank Lawler, D. Wm. E. Mason, R.

Indiana. Wm. F. Parrett, D. John H. O'Neall, D. Jason B. Brown, D. Wm. S. Holman, D. Geo. W. Copper, D. Thos. M. Browne, R. Wm. D. Bynum, D. E. V. Brookshire, D. Joseph B. Cheadle, R. Wes. D. Copper, R. Cheadle, R. Ch Wm. D. Owen, R. A. N. Martin, D. C. A. O. McClellan, D. Benj. F. Shively, D.

Iowa. John H. Gear, R. Walter I. Hayes, D. D. B. Henderson, R. J. H. Sweeney, R. Daniel Kerr, R. John F. Lacey, R. Edwin H. Conger, R. James P. Flick, R. J. R. Reed, R Jonathan P. Dolliver, R.

Thos.

John D. Stewart, D.

James H. Blount, D.

Judson C. Clements, D.

Henry H. Carleton, D.

Allen D. Candler, D.

Geo. T. Barnes, D.

Minois.

Minois.

John M. Morrill, R.

Edmund N. Morrill, R.

Edward H. Funston, R.

Bishop W. Perkins, R.

Harrison Kelley, R.

John A. Anderson, R. John A. Anderson, R. Erastus J. Turner, R. Samuel R. Peters, R.

Kentucky. N. Frank, R. Wm. J. Stone, D. Wm. T. Ellis, D. W. M. Kinsey, R. Richard P. Bland, D. Wm. J. Stone, D. Wm. H. Wade, R. James P. Walker, D. I. H. Goodnight, D. A. B. Montgomery, D. Asher G. Caruth, D. James P. Walker, I John G. Carlisle, D. *Montana*. W. C. P. Breckenridge, Thos. H. Carter, R.

Nebraska. James B. McCreary, D.W. J. Cornell, R. Thos. H. Paynter, D. John H. Wilson, R. H. Frank Finley, R. Geo. W. E. Dorse Negarda Gilbert L. Laws, R. Geo. W. E. Dorsey, R.

Louisiana. Theo. S. Wilkinson, D. H. Dudley Coleman, R. Andrew Price, D. N. C. Blanchard, D. Charles J. Boatner, D. S. M. Robertson, D.

Maine Thos. B. Reed, R. Nelson Dingley, jr., R. Seth L. Milliken, R. Chas. A. Boutelle, R.

Maryland Chas. H. Gibson, D. Herman Stump, D. Harry W. Rusk, D. H. Stockbridge, R. Barnes Compton, D. Louis E. McComas, R.

Massachusetts. Chas. S. Randall, R. Elijah A. Morse, R. Wm. Cogswell, R. Fred. T. Greenhalge, R. John W. Candler, R. Joseph H. Walker, R. Rodney Wallace, R. F. W. Rockwell, R.

Michigan. John L. Chipman, D. Edward P. Allen, R. James O'Donnell, R. Julius C. Burrows, R. C. E. Belknap, R. Mark S. Brewer, R.
J. R. Whiting, D.
A. T. Bliss, R.
B. M. Cutcheon, R.
F. W. Wheeler, R.
S. M. Stephenson, R. Minnesota

Mark H. Dunnell, R. John Lind, R Darius S. Hall, R. S. P. Snider, R. Sol. G. Comstock, R.

Mississippi. John M. Allen, D. James B. Morgan, D. Thos. C. Catchings, D. Clarke Lewis, D C. L. Anderson, D Thos. R. Stockdale, D. Chas. E. Hooker, D.

Missouri Wm. H. Hatch, D. Wm. H. Hatch, D.
Chas, H. Mansur, D.
Alex, M. Dockery, D.
John C. Tarsney, D.
John T. Heard, D.
R. H. Norton, D.
F. G. Niedringhaus, R.
Henry L. Morey, R.

Nevada Horace F. Bartine, R. New Hampshire. Alonzo Nute, R.

Orren C. Moore, R.

New Jersey. Chris. A. Berger, R. James Buchanan, R J. A. Geissenhainer, D. Samuel Fowler, D. Chas. D. Beckwith, R. Herman Lehlbach, R.

Wm. McAdoo, D. Mew York.

James W. Covert, D.

Felix Campbell, D.

Wm. C. Wallace, R.

John M. Clancy, D.

Thos. F. Magner, D.

F. T. Fitzgerald, D.

J. H. McCarthy, D.

J. H. McCarthy, D.

J. Mos. J. Chumpings Elijah A. Morse, R. John F. Andrew, D. Joseph H. O'Neil, D. Nathaniel P. Banks, R. P. Flower, D. Henry Cabot Lodge, R. Ashbell P. Fitch, D. Wm. Cogswell, R. W. G. Stahlnecker, D. John W. Candler, R. John W. Candler, R. John H. Walker, R. Chas, J. Knapp, R. Amos J. Cummings, D. Chas. J. Knapp, R. J. A. Quackenbush, R. Chas. Tracey, D. John Stanford, R. John H. Moffitt, R. Frederick Lansing, R. James S. Sherman, R. David Wilber, R. James J. Belden, R. Milton DeLano, R. Sereno E. Payne, R. Thos. S. Flood, R. John Raines, R. Chas. S. Baker, R. John G. Sawyer, R. John M. Farquhar, R. J. M. Wiley, D. Wm. G. Laidlaw, R.

North Carolina. T. G. Skinner, D. H. P. Cheatham, R. C. W. McClammy, D. B. H. Bunn, D. J. M. Brower, R. Alfred Rowland, D. J. S. Henderson, D. Wm. H. H. Cowles, D. H. G. Ewart, R.

North Dakota. H. C. Hansbrough, R.

Ohio. Benj. Butterworth, R. John A. Caldwell, R. Elihu S. Williams, R.

South Dakota. Ohto-Con. Robert P. Kennedy, R.O. S. Gifford, R. Wm C. Cooper R. John A. Pickler, R. Wm. C. Cooper, R. Wm. E. Haynes, D. A. C. Thompson, R. Tennessee. AC. Thompson, R. Jacob J. Pugsley, R. Jos. H. Outhwatte, D. H. Clay Evans, R. Chas, P. Wickham, R. Benton McMillan, D. Chas, H. Grosvenor, R.J. D. Richardson, D. Low E. Wochischer. James W. Owens, D. Joseph D. Taylor, R. Jos. E. Washington, D. W. C. Whitthorne, D. Wm. McKinley, Jr., R. Benj. A. Enloe, D. Ezra B. Taylor, R. Rice A. Pierce, D. Martin L. Smyser, R. James Phelan, D. Theo. E. Burton, R. Texas. Charles Stewart, D. Wm. H. Martin, D. C. B. Kilgore, D. D. B. Culberson, D.

Oregon. Binger Hermann, R. Pennsylvania. Henry H. Bingham, R. Silas Hare, D. Clas. O'Neil, R. J. Abbott, D. Samuel J. Randall, D. Wm. H. Crain Wm. H. Crain, D. L. W. Moore, D. Roger Q. Mills, D. Jos. D. Sayers, D. S. W. T. Lanham, D. W. D. Kelley, R. Alfred C. Harmer, R. S. Darlington, R. R. M. Yardley, R. Wm. Mutchler, D. D. B. Brunner, D. Vermont. John W. Stewart, R. Wm. W. Grout, R. Marriott Brosius, R. J. A. Scranton, R. Virginia. Thos. H. B. Browne, R. E. S. Osborne, R. James B. Reilly, D. Geo. E. Bowden, R. Geo. D. Wise, D. E. C. Venable, D. P. G. Lester, D. John W. Rife, R. Myron B. Wright, R. H. C. McCormick, R. Chas. R. Buckalew, D. Lewis E Atkinson, R. Paul C. Edmunds, D. Charles T. O'Ferrall, D. Wm. H. F. Lee, D. Levi Maish, D. Edward Scull, R. J. A. Buchanan, D S. A. Craig, R. John Dalzell, R. H. St. G. Tucker, D. Thos. M. Bayne, R. John L. Wilson, R. Jos. Warren Ray, R. Chas. C. Townsend, R. W. C. Culbertson, R. G. W. Atkinson, R. Wm. L. Wilson, D. J. H. McGinnis, R. Lewis F. Watson, R.

Rhode Island. Henry J. Spooner, R. Warren O. Arnold, R.

James Kerr, D.

South Carolina. Samuel Dibble, D. Geo. D. Tillman, D. James S. Cothran, D. James S. County, D. Chas. B. Clark, D. John J. Hemphill, D. Ormsby B. Thoma George W. Dargan, D.Nils P. Haugen, R. Wyron H. McCord, George W. Dai Wm. Elliott, D.

Republicans, 170; Democrats, 160; Republican majority, 10.

Washington

West Virginia.

J. Monroe Jackson, D.

Wisconsin. Lucien B. Caswell, R.

Charles Barwig, R.

R. M. La Follette, R. G. W. Van Schaick, R

George H. Brickner, D. Chas. B. Clark, R. Ormsby B. Thomas, R.

Myron H. McCord, R.

TERRITORIAL DELEGATES.

ARIZONA.-Marcus A. Smith, D. IDAHO.—Fred T. Dubois, R. New Mexico.—A. Joseph, D. Utah.—John T. Caine, D. Wyoming.—Joseph M. Carey, R.

U. S. MINIS:	TERS ABROAD.
Countries.	Name, App.
Argentine Republic	Name. App. J.R. G. Pitkin 1889
Austria-Hungary	.Fred D. Grant1889
Belgium	.E. H. Terrill 1889
Bolivia	.Fred D. Grant,
Brazil	.Robt. Adams, jr1889
Central America	.L. B. Mizner 1889
Chili	Patrick Egan 1889
China	Chas. Denby1885 John T. Abbott 1889
Colombia	John T. Abbott 1889
('ores	Hugh A Dingmore 1996
Denmark	.Clark E. Carr1889
France	Clark E. Carr 1889 Whitelaw Reid 1889 W. W. Phelps 1889 Robt. T. Lincoln 1889
Germany	.W. W. Phelps 1889
Great Britain	Robt. T. Lincoln1889
Greece	A. L. Snowden1889
Roumania	A. L. Snowden 1889
Hawaiian Islanda	J. I. Stevens 1990
Havti	.Fred Douglass1889
Italy	Fred Douglass 1889 A. G. Porter 1889 J. F. Swift 1889 E. E. Smith 1888
Japan	.J. F. Swift 1889
Liberia	. E. E. Smith 1888
Mexico	.Thos. Ryan
Netherlands	.S. R. Thaver1889
Persia	E. Spencer Pratt1886
Peru	.John Hicks1889
Portugal	Geo. B. Loring 1889
Russia	.[Vacant.] .Jacob T. Child1886
Siam	.Jacob T. Child 1886
Spain	.T. W. Palmer1889
Sweden and Norway.	.W. W. Thomas, ir. 1889
Switzerland	T. W. Palmer
Turkey	.Sol. Hirsch 1889
Uraguay and Paragua	yGeo. Maney1889 .W. L. Scruggs1889
Venezuela	.W. L. Scruggs1889

The ministers to Austria, Brazil, Central America, Chili, China, Colombia, France, Germany, Great Britain, Italy, Japan, Mexico, Peru, Russia, Spain, and Turkey, rank as Envoys Extraordinary and Ministers Plenipotentary; the others are Ministers Resident. Those to Great Britain, France, Germany, and Dussia processes \$2,500 a vear to Austria. Those to Great Britain, France, Germany, and Russia, receive \$17,500 a year; to Austria, Brazil, China, Italy, Japan, Mexico, and Spain, \$12,000; to Central America, Chili. Peru. and Turkey, \$10,000; Colombia, Argentine Republic, Belgium, Hawaiian Islands, and the Netherlands, \$7500; Sweden and Norway, \$7400; Greece, etc., \$6500; Venezuela, \$6000; and Bolivia, Corea, Hayti, Liberia. Persia, Switzerland, Denmark, Paraguay, Portugal, and Siam \$5000.

and Siam, \$5000.

#### The Center of Population.

The extreme eastern point of the United States is at longitude 62° 52′ west from Greenwich; extreme western, 167° 59′; middle point, 113° 25′ 30′. The geographical center of the country, however, is at 95° 47′ 30′, not far from Omaha. The center of population in 1880 was eight miles west by south from the heart of Cincinnati, which brings it one mile south of the Ohio River, and one and a half miles southeast of Taylorsville, Ky. Such center is officially defined in the census report as "the point at which equilibrium would be reached, were the country to be taken as a plane surwere the country to be taken as a plane surface, itself without weight, but capable of sustaining weight and loaded with its inhabitants, in number and position as they are found at the period under consideration, each individ-ual being assumed to be of the same gravity as every other, and consequently to exert

pressure on the pivotal point directly proportioned to his distance therefrom." In brief, it is the center of gravity of the country's population. It has always clung pretty closely to the 39th degree of north latitude. Beginning in 1790 with a point 23 miles east of Baltimore, it moved in the next decade westward 41 miles; by 1810, 36 miles, to a point 40 miles northwest of Weshington City. be 1800 180 41 miles; by 1810, 36 miles, to a point 40 miles northwest of Washington City; by 1820, 50 miles, to the center 16 miles north of Woodstock, Va.; 1830, 39 miles, 19 miles west-southwest of Moorefield, W. Va.; 1840, 55 miles, 16 miles south of Clarksburg, W. Va.; 1850, 55 miles, 23 miles southeast of Parkersburg, W. Va.; 1860, 81 miles, 20 miles south of Chillicothe, O.; 1870, 42 miles, 48 miles east by north of Cincinnati; and 1830, 58 miles. The census to be taken this year will move it considerably westward, and perhaps northward also. westward, and perhaps northward also.

#### Presidents and Vice-Presidents of the United States.

President.	Vice-President.	Term of Office.	PRESIDENT.	VICE-PRESIDENT.	Term of Office.
George Washington John Adams Thomas Jefferson Thomas Jefferson James Madison James Madison	Thos. Jefferson Aaron Burr George Clinton George Clinton	1789-1797 1797-1801 1801-1805 1805-1809 1809-1813	Millard Fillmore Franklin Pierce James Buchanan. Abraham Lincoln. Abraham Lincoln.	William R. King J. C. Breck'ridge Han'bal Hamlin.	1850-1853 2 y 8 m 1853-1857 1857-1861 1861-1865
James Monroe. John Q. Adams Andrew Jackson. Andrew Jackson. Martin Van Buren. Wm. H. Harrison. John Tyler James K. Polk Zachary Taylor	John C. Calhoun John C. Calhoun M. Van Buren R. M. Johnson John Tyler George M. Dallas	1825-1829 1829-1833 1833-1837 1837-1841 1841-1m 1841-1845 3y 11m 1845-1849	Andrew Johnson Ulysses S. Grant Ulysses S. Grant Ruth ford B. Hayes James A. Garfield Chester A. Arthur. Grover Cleveland Benjamin Harrison	Schuyler Colfax. Henry Wilson Wm. A. Wheeler Chest. A. Arthur T. A. Hendricks	1873-1877 1877-1881 1881-64m 1881-1885 3 y 54 m 1885-1889

#### The Wealth of our Presidents.

The Presidents of the United States have generally been men of but moderate means, especially in the first half-century of the republic. Not one was a millionaire.

Washington had an estate of nearly \$300,000.

John Adams left a moderate fortune.

Jefferson was often straitened for means, and died poor. If Congress had not bought his library at a price (\$25,000) much beyond its value, and other assistance been given him, he would hardly have escaped bankruptcy in his later years.

Madison saved, and was comparatively rich for his time. Mrs. Madison received \$30,000

from the nation for his manuscript paper Monroe died in poverty, and was buried at the expense of his relatives.

John Quincy Adams left about \$50,000.

Jackson had little but the valuable estate known as the Hermitage, near Nashville, Tenn. Van Buren was accounted rich in his day, being worth nearly \$300,000.

Polk died possessed of about half that sum.

Harrison was poor, and obtained a living

with difficulty for several years before he was chosen President.

Tyler was a bankrupt when he became President, but saved his means, married a wealthy wife, and died rich.

Taylor left about \$150,000.

Filmore had a pretty large fortune, and married rich after he left the White House. Pierce saved \$50,000, about half his salary,

while President, but had little else.

Buchanan had at least \$200,000. Lincoln left but \$75,000.

Johnson was reputed worth about \$50,000. Grant became wealthy, but lost his fortune through others' rascality.

Hayes is comfortably well off. Garfield had a competence.

Arthur died in comfortable circumstances. Cleveland will go out of office, it is thought, with \$250,000.

Harrison has but moderate means.

Other Interesting Facts.

General Grant was the youngest President General Grant was the youngest President when inaugurated, at 47 years of age. Cleveland was 48 when inaugurated; Garfield, Polk, and Pierce, 49; Fillmore, 50; Arthur and Tyler, 51; Lincoln, 52; Hayes, Taylor, and Van Buren, 55; Washington and Johnson, 57; Jefferson, Madison, J. Q. Adams, and the elder Harrison, 58; Monroe, 59; Buchanan, 60; John Adams and Jackson, 62. General Harrison was 55 when inaugurated

was 55 when inaugurated.
In politics Washington and John Adams
were called Federalists; Jefferson, Madison, were called Federalists; Jefferson, Madison, Monroe, and J. Q. Adams, Republicans—a party deemed the father of the Democratic party, to which belonged Jackson, Van Buren, Tyler, Polk, Pierce, and Buchanan, and to which belongs Cleveland. W. H. Harrison, Taylor, and Fillmore were Whigs, and Lincoln, Johnson, Grant, Garfield, and Arthur were Republicans of the later school, as are Hayes and Renjamin Harrison. Hayes and Benjamin Harrison.

Of the ex-Presidents Hayes and Cleveland are now living. John Adams was the oldest, dying at 91, on the Fourth of July, 1826, the same day on which Jefferson, his successor, the third oldest ex-President, died at 83. Madien died at 85 in 1828; LO Adams at 81 in the third oldest ex-President, died at 83. Madison died at 85, in 1836; J. Q. Adams at 81, in 1848; Van Buren at 80, 1862; Jackson at 78, 1845; Buchanan at 77, 1868; Fillmore at 74, 1874; Monroe at 73, 1831; Tyler at 72, 1862; Harrison at 68, 1841; Washington at 67, 1799, and Johnson at the same age, 1875; Taylor at 68, 1850; Pierce at 65, 1869; Grant at 63, 1886; "coln at 56, 1865, and Arthur at the same, Polls at 54, 1849; and Garfield at 50, 1881

; Polk at 54, 1849; and Garfield at 50, 1881.

The public debt of the United States, in the last year of their Presidential service, was as follows: Washington, \$83,762,172.07; Adams, \$62,976,294,35; Jefferson, \$65,196,317.97; Madison, \$17,334,933.74; Monroe, \$90,369,777.77; J. Q. Adams, \$67,475,043.87; Jackson, \$37,513.05; Van Buren, \$3,573,343.82; Harrison, \$3,565,54; Tyler-\$23,461,652.50; Polk,\$47,044.862.23; Taylor, \$69,061,858.69; Fillmore, \$66,199,341.71; Pierce, \$31,972,537.90; Buchanan, \$64,342.87,88; Lincoln, \$2,680.647,869.74; Johnson, \$2,611,837.86; 19; Grant, \$2,099,499,344.99; Hayes, \$1,942.72; 295,34; Garfield, \$1,840.588,811.98; Arthur, \$1,405,923,350.18; Cleveland (debt. less cash in treasury, Dec. 1, 1889), \$1,144,849,853. The fathers of all the Virginia Preidents—Washington, Jefferson, Madison, and Monrowere planters; and those of Jackson, Van were planters; and those of Jackson, Van The public debt of the United States, in the

were planters; and those of Jackson, Van Buren, Polk, Pierce, Taylor, Fillmore, Lincoln, Garfield, and Harrison were also farmer. John Adams was son of a small farmer as shoemaker, while he himself was a lawyer and father of J. Q. Adams. Tyler's father was a politician, Buchanan's, an Irish emigrant, Grant's, a tanner, Johnson's, a petty politician, and Hayes's father was a merchant. Cleveland is the cyler derryman's con was alected President. is the only clergyman's son ever elected President. Arthur was also the son of a minister but not President-elect. The ancestry of dent. Arthur was also the son of a minison, but not President-elect. The ancestry of Washington, the Adamses, Madison, the Hirrisons, Taylor, Fillmore, Pierce, Linosa, Johnson, Hayes, Garfield, and Cleveland, was English; of Jefferson, Welsh; Monroe Grant, Scotch; Jackson, Buchanan, and Arthur, Scotch-Irish; and Van Buren. Dutch.

Washington, Jefferson, Madison, Monroe, W. H. Harrison, Tyler, and Taylor, were natives of Virginia; the Adamses, of Massachusetts; Jackson, Polk, and Johnson, of North Carolina; Van Buren and Fillmore, of New York; Pierce, of New Hampshire; Buchanan, of Pennsylvania; Lincoln, of Kentucky; Grant, Hayes, Garfield, and B. Harrison, of Ohlo; Arthur, of Vermont; and Cleveland, of New Jersey. The two Andrews and Abraham—Jackson, Johnson, and Lincoln—sprang from Jersey. The two Andrews and Abraham—Jackson, Johnson, and Lincoln—sprang from the "poor white trash" of the South. President Taylor's father was a colonel, Pierce's a general; and a bare majority of the Presidents were military men. Lincoln was a milita captain in the Black Hawk war, where Taylor was a general; Monroe was a young colonel in the Revolution; the younger Harrison was a brigadier by brevet, and Hayes and Pierce full brigadiers; the elder Harrison, with Washington, Jackson, Taylor, and Garand Pierce full brigadiers; the elder Harrison, with Washington, Jackson, Taylor, and Garaffeld, was a major-general; and Grant full general. Arthur was Quartermaster-general of New York in the Rebellion. Monroe was wounded in the shoulder at Trenton; W. H. Harrison was slightly hurt at Tippecanoe; Jackson was taken by the British when a boy and twice cut by a sabre, and was twice wounded by pistol-shot in a duel and a street fight; and Pierce was injured by falling from his horse in the advance on the City of Mexico. Hayes was wounded four times in the war of the Rebellion. war of the Rebellion.

Of the first seven Presidents, all but one were 60 years old on leaving office, having served two terms; and one of those who served but a single term would have reached 66 years at the end of another. Three of the seven died on the 4th of July, two on the same day and year. They (John Adams and Jeffer-son) were on the sub-committee of three that drafted the Declaration of Independence, and drafted the Declaration of Independence, and died on the same day and year, on the anniversary of the Declaration, just half a century from the day it was adopted. The former was the oldest of the Presidents, dying at 91; the other was the third oldest, dying at 83. Madison died at 85. The names of three of the seven end in son, yet none of them transmitted his name to a son. The initials of the names of two of the seven are the same; the initials of two others are the same; and those of still two others the same. The remaining one, who stands alone in this particular, was Washington. Of the first five one had a son, and that son was also President. Neither of the Presidents who had sons was elected for a second term, Six of them—Washington, Madison, Jackson, Polk, and Cleveland—were childless; four—Jefferson, Monroe, Pierce, and Johnson—were fathers of daughters only; thirteen were fathers of sons. All the Presidents were or had been married men, except Buchanan. The elder Harrison had the largest family, ten children, of whom nine reached adult age. Tyler's widow died but a few months ago, at a very advanced age; Mrs. Garfield and Mrs. Grant are still living.

The losses to the public funds, on the \$1000, The losses to the public tunds, on the \$1000, under the several Presidents, are reported as follow: Washington, \$2.22; J. Adams, \$2.59; Jefferson, \$2.75; Madison, \$4.16; Monroe, \$8.58; J. Q. Adams, \$4.39; Jackson, \$7.52; Van Buren, \$11.71; Harrison and Tyler, \$6.40; Pelk, \$4.08; Taylor and Fillmore, \$4.19; Pierce, \$3.55; Buchanan, \$3.81; Lincoln, .76; Johnson, \$7. Claret. \$4.

.57; Grant, .84. There have been several "minority Presidents." Neither Polk, Taylor, nor Buchanan, had an absolute majority of the popular vote.

Mr. Lincoln, although he had precisely 214
times as many electoral votes as his principal
opponent (180 against 72), had much less than
had the popular vote. Gen. Hayes was a minority President by nearly 250,000, and Gen. Garfield had less than 10,000 popular majority. Mr. Cleveland was really elected by about 1100 voters in New York, who gave him the decisive 36 electoral votes of that State. Gen. B. Harrison lacked about 100,000 of a majority

B. Harrison lacked about IW, WW or a majorny of the popular vote.

All the Presidents to Cleveland gave together but 77 vetoes, including "bills pocketed," not returned within the prescribed time,—Washington 2, Madison 6, Jackson 11, Tyler 10, Pierce 5. Buchanan 7, Johnson 13, Grant 6, Hayes 9, and others 8. Ten bills were passed over vetoes. Mr. Cleveland in 1886 alone returned 115 bills without his signature of which 101 were reargon bills and sent ture, of which 101 were pension bills, and sent in numerous vetoes in later years.

in numerous vetoes in later years.

Both the Adamses, Jefferson, Madison, Monroe, both Harrisons, Polk, Pierce, Buchanan, Hayes, Garfield, and Arthur, thirteen in all, were college graduates. Jefferson, Madison, Monroe, J. Q. Adams, Van Buren, and Buchanan, had been Secretaries of State, and Monroe also Secretary of War, as was Genant ad interim. Only Washington (Episcopalian), W. H. Harrison (Methodist), B. Harrison, (Presphytrian), Eillunger (Unitarian) Harrison (Presbyterian), Fillmore (Unitarian), and Garfield (Disciple), were church memand Garneld (Disciple), were church members. The inclinations of others are said to have been: Presbyterian—Madison, Jackson, Buchanan, Polk, Lincoln; Episcopal—Monroe, Van Buren, Tyler, Taylor, Arthur; Unitarian—the Adamses; Methodist—Grant; Congressian—Discrete Tolking at the Adamses. gregational — Pierce. Johnson attended both Presbyterian and Methodist churches. Jef-ferson was a Free-thinker. Washington, Jackson, Johnson, and Garfield were Free

Washington was the tallest President, six Washington was the tallest President, six feet two inches: Madison the shortest, at five feet six; and Harrison is probably next, at five feet eight, though Van Buren was also a short man. The Adamses and Taylor are said also to have been five eight. Jefferson, Monroe, Jackson, Tyler, Lincoln, Garfield, and Arthur, were all six feet or more. Jackson was six feet one, yet he was probably the lightest President, at 145 pounds. Cleveland, at 240, and Washington, 200, were presumably the heaviest. in avoirdurois. All presumably the heaviest, in avoirdupois. All the Presidents to Lincoln had usually smoothshaven faces, except J. Q. Adams and Van Buren, who wore small side-whiskers. Lincoln cultivated in office chin and side-whiskers. Grant, Hayes, Garfield, and Harrison the younger had or have full beards; Arthur, mustache and side-whiskers; Cleveland, mus-tache only. The Executive eyes, like the present Harrison's, were mostly blue; his grandfather's were dark; Cleveland's and Arthur's, brown. Pierce's were brilliant black, as also his hair. Most of the Presidents were gray, or became so during their incumbency; but a number had dark hair, and Jefferson's

was red, becoming silvery white.
Five Presidents were named James, and the father of Madison was also James, as was the father of Buchanan. Three were named John, including both the Adamses, and two Andrew. Harrison is the sixteenth President with only one given name, counting Cleveland, who had another (Stephen Grover), but rejected it. The letter a is in the name of every President except Tyler. Letters in the names of the present Cabinet by acrostic form the name of the President; thus,

W. H. H. Miller. Benj Amin F. Tracy. Redfield PRoctor. John WanamakeR. William WIndom. Jeremiah M. Rusk. John W. NOble. James G. BlaiNe.

#### Presidential Elections — Popular and Electoral Vote, 1888 and 1884.

1888.							1884.					
	ů l	nd,			Ele	ct.		od,	, si		Ele	
STATES.	Harrison, Rep.	Cleveland, Dem.	Fisk, Prohib.	Streeter, Labor.	Har.	Clev.	Blaine, Rep.	Cleveland, Dern.	Butler, People's	St. John, Prohib,	Cleve.	
Alabama	57,197	117,310	583		-	10	59,591	93,951	879	612	10	
rkansas	58,752	85,962	614	10,613	18.1	î	50,895	72,927	1,847		7	
California	124,809	117,729	5,761	000,000	8		102,416	89,288	2,017	2,920	14	
Colorado	51,796	37,610	2,210	112	3	**	36,290	27,723	1,958	761	**	
Connecticut	74,584	74,920	4,234		2	6	65,923	67,199	1,688	2,305	6	
Delaware	12,978	16,414	400	7.33	+4	3	12.951	16,964	6	55	3	
Florida	26,659	39,561	403	******		4	28,031	31,766		72	4	
leorgia	40,443	100,472	1.802	136		12	48,603	94,667	145	195	12	
llinois	370,636	348,594	21,562	8,456	22		337,474	312,355	10,910	12,074	100	
ndiana	263,361	261.018	9,881	2,694	15		238,463	244,990	8,293	3,028	15	
owa awo	211,598	179,877	3,550	9,105	13		197,089	177,316	****	1,473	1	
Kansas	182,502	102,541	6.452	36,237	9	9.	154,406	90,132	16.341	4.495	100	
Kentucky	155,134	183,800	5,225	622	100	13	118,122	152,961	1,691	3,139	13	
ouisiana	30,701	85,032	130		200	8	46,347	62,540	1	100.0	8	
faine	73,734	50.482	2,690	1,345	6		72,209	52,140	3,953	2.160	43	
Maryland	99,986	106,168	4.766	2,020	100	8	85,699	96,932	531	2,794		
Massachusetts	183,447	151,990	8,641		14		146,724	122,481	24,433	10,026		
Michigan	236,370	213,404	20,942	4,542	13	**	192,669	149,835	42,243	18,403		
dinnesota	136,359	99,664	15,000	4,014	7		111,923	70,144	3,583	4,684	100	
dississippi.,	30,096	85,471	218	29		9	43,509		****	2,002	9	
dissouri	236,253	261,954	4.540	18,589		16	202,929	235,988		2,153		
Vebraska	108,425	80,552	9,429	4,226	5		76,912	54,391		2,899	10-78	
Nevada	7.088	5.149	41	9,000	3		7,193	5,578	26	*,000	7.8	
New Hampshire.	45,728	43,358	1,592	13	4		43,249	39,183	552	1.571	**	
lew Jersey	144.344	151,493	7.904	10	-	9	123,440	127,798	3,496	6,159	9	
New York	660,338	635,963		626	36	1	562,005	563,154	16,984	25,016		
North Carolina.	134,784	147,902	00,001	0.40		ii	125,068	142,952		454	11	
Ohio	416,054	396,455	24,356	8,496	23	1.	400,082	368,280	5,179	11.069	11	
regon	33,293	26,524	1,677	363	3		26,860	24,604	726	492		
ennsylvania	526,091	446,633	20,947	3,873	30	**	473,804	392,785	16,992	15,283		
Rhode Island	21,960	17,533	1,281	0,010	4		19,030	12,391	422	938		
South Carolina.	13,740	65,825		CHARLE		9	21,733	69.890	1	2568	9	
Cennessee		158,787	F 000		78	12	124,078	133,258	957	1,131	12	
exas	139,989		5,969	00 450		13	93,141	225,809				
exas	88,280	234,883	4,749	29,459	4	1			3,321	3,534	13	
Virginia	45,192	16,788	1,450	******		12	39,514	17,331	785	1,752	40	
Wood Vincinia	150,438	151,977	1,678	*****			63,096	67,317	810	939		
West Virginia	78,491	79,330	******		11	6	139,356	145,497	4 200	138	6	
Wisconsin	176,553	155,282	4,277	8,552	11		161,157	146,459	4,598	7,656	**	
Total	E 000 000	E 991 091	DAE FOR	141.000	999	160	4 951 001	4 974 098	125 920	150 980	010	
Total	0,209,009	0,004,004	690, (UD	191,902	MIG	TAG	4,001,001	3,013,000	110,010	TOOLOGE	le Th	

1884, 37; Harrison's majority, 1889, 65.

#### Popular Vote since 1820, Etc.

The total popular vote for President at the rel total popular voice 167 Freshelt at the several elections since 1820 was as follows: 1824, 352,062; 1828, 1,156,828; 1832, 1,217,691; 1836, 1,488,205; 1840, 2,410,772; 1844, 2,698,608; 1848, 2,872,906; 1852, 3,142,877; 1856, 4,053,967; 1860, 4,676,853; 1864, 4,024,792; 1868, 5,724,624; 1872, 6,431,149, 1876, 8,426,073; 1880, 9,218,550; 1884, 70,067,610; 1828, 11,305,562.

THE Senate of the United States has only 84 members, against the British House of Lords with about 560, and the French Senate with 300. The House of Representatives has 330 members, the House of Commons 670, the French Chamber of Deputies 584, and the Italian Chamber 506. The basis of represen-tation in our lower House of Congress was at first 1 in 30,000 of population, but is now 1 in 154,000. Partisan legislation makes some queer Congressional districts. One in Missouri, planned to include as many of the negro voters as possible, is longer in its crooked-ness than the State itself. The "Shoestring District" in Mississippi, constructed with simi-

lar intent, is 500 miles long by 40 broad, and a di-trict in Pennsylvania is shaped like a dumb-bell.

MEMBERS of State Senates vary from 9 in Delaware to 51 in Illinois, and of lower houses from 21 in Delaware to 321 in New Hampshire. New York has only 32 and 128 in the two chambers, Pennsylvania 50 and 201. Massachusetts 40 and 240, and Michigan 32 and 100. The cost of a legislative session to the State ranges from \$52,000 in South Carolina, where the session is short, to \$686,500 in Pennsylvania, with 158 days' session. The daily average cost in the several States is \$1000 to \$4000.

THE Cabinet began in Washington's time with only Secretaries of State, the Treasury, and War, and the Attorney-General. The Secretary of the Navy was added in 1798, the Postmaster General in 1829, Secretary of the Interior in 1849, and Secretary of Agriculture in 1889.

Origin of the Names of States and Territories.

Alabama, from an Indian word meaning "Here we rest," and referring to an historical

neident variously reported.

Arizona (Spanish), "sand hills," from the character of large part of the Territory.

Arkansas, Kansas with French prefix arc,

"bended bow.

California, from the designation in an old Spanish romance of an imaginary island abounding in gold.

Colorado (Spanish), "red," from the color of much of the soil.

Connecticut (Indian Quinnitukut), "upon the long river."

Delaware, from Lord de la Warr, second Governor of Virginia. Florida (Spanish), "the flowery," discovered on Pascua Florida, or Easter day. Georgia, from George II., King of England.

Idaho (Indian). Illinois, from Illini, an old Indian tribe.

Indiana, from Indian.
Iowa, "the sleepy ones," name given the

Pajohas by the Sioux.

Kansas, name of Indian tribe, said to mean "smoky water" or "good potato."

Kentucky (Indian), "head of a river."

Louisiana, from Louis XIV., King of France. Maine, name of old French province,-some

think named from the mainland. Maryland, from Henrietta Maria, wife of Charles I. of England. Massachusetts (Indian), "about the great

hills."

hills."
Michigan (Indian), "a fish-weir."
Minnesota (Indian), "cloudy water."
Mississippi (Indian), "the long river," poet-ically Father of Waters.
Missouri (Indian), "muddy," from the

Missouri (Indian), "muddy," from river, like the two next preceding. Montana (Spanish), "mountainous." Nebraska (Indian), "shallow rive.

"shallow river" or water valley."

Nevada (Spanish), "snowy." New Hampshire, from Hampshire county,

New Jersey, from the island of Jersey, where Gov. Carteret was born.

New Mexico, from Mexico, to which the country formerly belonged.

New York, from the Duke of York, after-

wards James II. of England.
North Carolina and South Carolina, from
Charles IX. of France, under whom Ribault's expedition built Arx Carolina, a fort at Port Royal, which afterwards gave the latter name to the mainland.

North Dakota and South Dakota (Indian), from the name of the confederated Sioux

tribes, meaning leagued or allied.

Ohio (Indian), "beautiful," first applied to

the river. Oregon (Indian), "river of the West." Some say Spanish "oregans," wild marjoram. Pennsylvania, "Penn's woods," from Wm.

Penn. Rhode Island (Dutch), Roodt Eyland, island." Some say from Isla of Pl

island." Some say from Isle of Rhodes, which it was thought to resemble. Tennessee (Indian), "river of the big bend." Texas, generic name of the Indian tribes in this region.

Utah, probably from the Ute tribes.

Vermont (French), green mountain.
Virginia and West Virginia, from Elizabeth,
the "Virgin Queen."

Washington, from the Father of his Country. Wisconsin (Indian), "wild, rushing channel." Wyoming, from the Pennsylvania valley of

For some time during the pendency of the adoption of the Federal constitution, Rhode Island and North Carolina, which long de-Island and North Carolina, which long declined to ratify it, had to be treated as foreign countries. The first measure passed by the new House of Representatives, assembling under the constitution April 80, 1789, was one to levy duties on imports, and it necessarily provided that these States, not yet being in the Union, should pay duty upon all goods not of their own production, which they should import into the Union. This threatened ruin to their commerce, and in November of the same year North Carolina ratified the constitution, but Rhode Island not until May. 1790. tution, but Rhode Island not until May, 1790.

## Area and Population of the States and Territories.

NAMES.	Land Surf'ce, Sq.mil's	Acreage improv'd.	Popula- tion 1880,	
Alabama	51,540	6,375,708	1,262,505	lì
Arizona	112,920	56,071	40,440	1
Arkansas	53,045	3,595,603	802,525	1
California	155,980	10,669,698	864,694	1
Colorado	103,645	616,169	194,327	1
Connecticut	4,845	1,642,188	622,700	li
Dakota	147,700			li
Delaware	1,960	746,958		1
Dist. Columbia	60	12,632	177,624	1
Florida	54,240	947,640		1
Georgia	58,980	8,204,720	1,542,180	h
daho	84,290	197,407	32 610	١i
Illinois	56,000	26,115,154	3,077,871	18
Indiana	35,910	13,933,738		D
Indian Territory	64,090	*******	112141111	1
owa	55,475	19,866,541	1,624,615	11
Kansas	* 81,700	10,739,566	996,096	1
Kentucky	40,000	10,731,683	1,648,690	1
Louisiana	45,400	2,739,979	939,746	1
Maine	29,895		648,936	1
Maryland	9,860	3,342,700	934,943	1
Massachusetts	8,040		1.783.085	1
Michigan	57,430	8,296,862	1,686,937	1
Minnesota	79,205	7,240,693	780,778	1
Mississippi	46,340	5,216,937		
Missouri	68,735			

Sect of

NAMES.	Surf'ce, Sq.ml's.	Acreage improv'd.	Popula- tion 1880.
Montana	145,310	262,611	39,159
Nebraska	76,185		452,402
Nevada	109,740	344,423	62,266
New Hampshire.	9,005	2,308,112	346,991
New Jersey	7,455	2,096,297	1,131,116
New Mexico	122,460	237,392	119,565
New York	47,620	17,717,862	5,082,871
North Carolina	48,580	6,481,191	1,399,750
Ohio	40,760	18,081,091	3,198,069
Oregon	94,560	2,198,645	174,768
Pennsylvania	44,985	13,423,007	4,282,891
Rhode Island	1,085	298,486	276,531
South Carolina	30,170	4,132,050	995,877
Tennessee	41,750		1,542,859
Texas	262,290	12,650,814	1,591,749
Utah	82,190	416,105	143,968
Vermont	9,135		332,286
Virginia	40,125	8,510,113	1,512,565
Washington	66,880	484,346	75,116
West Virginia	24,645	3,799,307	618,457
Wisconsin	54,450		1,315,497
Wyoming	97,575	83,122	20,789
Unorganized ter.	5,740	*******	******
Total	2,970,000	284,771,042	50,155,788

#### Statistics of Cities in the United States.

				•				
PLACES.	Pop. '89	Pop. '80	Indebted- ness.	PLACES.	Pop. '8	Pop.	'80	Indebted- ness.
Albany	103,000	87,584	\$4,309,000	Petersburg, Va	26.00	0 21	652	1,088,700
Allegheny	110,000	78,472	1,500,000	Petersburg, Va Philadelphia Pittsburgh	1,141,00	0 847	,652 ,452 ,883	29,377,262
Altoona	30,000		411,000	Pittsburgh	250,00	0 153	.883	10,454,266
Atlanta	75,000 480,000		2,216,500 36,000,000	Portland, Me	42,00 60,00	0 33	,824	2,846,776 100,000
Bay City	81.240	20.638	430,000	Portland, Ore Providence	180,00	0 104	,000 ,760 ,230 ,243	7.817.231
Bloomington, Ill	81,249 26,317 416,226 48,000	20,638 17,700 363,938 29,153	112,500	Reading, Pa	64,00	0 43	.230	7,817,231 884,510 5,619,916
Boston	416,226	363,938	112,500 29,042,305	Richmond	85.00 120,00	0 63	,243	5,619,916
Bridgeport	48,000	29,153	1,553,000	Rochester	120,00	0 87	,057 ,000	5,399,000
Brooklyn	843,602 260,000		9,167,910 9,167,910	Sacramento	40,00	0 23	,000	1,650,000
Burlington, Io	30,000	19.000	272 000	St. Joseph	70,00 500,00	0 875	,000,	21 926 100
Cambridge	70,000	52,680	1,624,000 1,382,000 3,972,283 1,200,000	St. Paul.	200,00	0 41	639	6,800,000
Cambridge Camden, N. J	75,000 62,000	41,757	1,382,000	Salem, Mass	50.00	0 27	,639 ,347 ,594	881.638
Charleston	62,000	49,027	3,972,233	San Antonio	55,00 330,00	0 20	,594	853,500
Chelsea, Mass	30,000	503,298	1,200,000	San Francisco	330,00	0 233	,066	877,310 8,645,300
Chicago	1 3,455,000	255,809	26,000,000	Savannah Scranton	55,00 100,00	0 45	,916 ,925	300,000
Cleveland	260,000	159.504	8,156,200 261,700 4,600,000 348,000	Somerville, Mass	38,00	0 24	,924	860,500
Cohoes, N. Y	23,000	19,556 51,853 18,406 33,480	261,700	Somerville, Mass Springfield, Ill	26,50	O) 19	,500	929,850
Columbus, O	110,000	51,853	4,600,000	Springfield, Mass Springfield, O	42,00	0 83	,149 ,727	1,316,000
Council Bluffs Dallas, Tex	27,000 61,855	18,406	1 000 000	Springfield, O	35,00	0 20	,727	813,300 1,239,500
Davenport, Io	33,000	21,815	1,083,600 275,000	Syracuse Taunton, Mass	42,00 35,00 87,73 27,50	0 91	,158 ,252	1,101,606
Dayton, O	65,000	38,757	1,457,000	Terre Haute	40,00	D) 266	512	840,000
Denver	132,000	35,714	650,000	Toledo	92,00	0 53	635	8,158,369 700,000
Des Moines	48,000	35,714 22,907	800,000	Trenton	60,00	0 29	,938	700,000
Detroit	270,492	115,006	800,000 1,592,500 745,826	Troy. Utica Washington	65,00	0 57	,635 ,938 ,000 ,927	1,105,720
Dubuque	33,000 40,000	19,060	543,000	Weshington	50,00 190,00	100	,92, 199	87,500 20,142,050
East Saginaw Elizabeth, N. J	37,000		3,400,000	Waterbury, Ct	85,00	0 200	819	425,000
EHHILI CO. C.	08,000	20.644	314,860	Wheeling	83,40	1 81	186	
Erie	40,000	28,346	1.029.000	Wilkesbarre	40,00	0 23	,186 ,340	150,000
Evansville	55,000 40,000	29,360	2,175,000 590,000 265,000	Wiliamsport, Pa	32,00 58,00	0 18	,902	713,200 1,441,750
Fort Wayne	23,500	19,288	965 000	Wilmington	58,00 85,00	U 42	,000 ,040	1,441,750 2,893,477
Grand Rapids	80,000		996,000	Worcester				
Harrisburg	43,000	80.798	1,063,000	These statistics	are fr	om re	turi	s of late
Hartford Haverhill, Mass	53,000	42,560	1,063,000 1,897,8 <b>34</b>	November or ear cases from the Ma	ly Dec	ember	, 18	89, in all
Haverhill, Mass	30,000	42,560 18,478 30,942 24,926	358,500	the city. In case o	syor or	a lead	low	editor of
Hoboken	50,000 125,000	94,096	1,131,850 1,4000,00	ful and conservati	ve estin	nate"	of r	nonulation
Indianapolis	35,000	76,200	678,716	lhas been taken.	and us	mally .	the	Mayor's
Jackson, Mich	27,000	16,105	678,716 250,000	statement of deb	t; then	the	amo	ount of a
Jersey City	179,000	122,207	16,445,383	sinking fund has l	been de	ducted	irc	m appar-
Kansas City	185,000	56,764	687,121 458,694	ent debt, only the i been given.	remamo	er, or	rea	i deot, mas
Kansas City Kingston, N. Y Lancaster, Pa Lawrence, Mass	26,000 33,000	18,387 28,846	408,094	THE number of r	nember	s of C	กทยา	ress from
Lawrence, Mass.	45,600	39,068	541,254 1,458,437	the adoption of the	Connetit		+~+1	ha manaant
Leavenworth	21,000	18,000	849,091	time, has been: F	irst and	l Seco	ond	Congress,
Lewiston, Me	23,100	19,082	* 907,366	1739-93, 26 Senator	s, 65 Rep	oresen	tati	ves: Third
Lexington, Ky	85,000	16,684	400.000	Twelfth 1909 19	808, 80 89 and	and 1	UD; Phir	Eighth to
Louisville	226,362 80,000	126,566 59,840	9,000,000	time, has been: F 1789-93, 26 Senators to Seventh, 1798-1 Twelfth, 1803-13, 3 Seventeenth, 1713- to twenty-second, third to Twenty-se	23. 84 s	ind 18	1 : F	ighteenth
Lynn	55,000	38,376	1,126,358 763,852 917,771 3,250,000	to twenty-second.	1823-83,	48 and	213	Twenty-
Manchester, N. H.	42,000	82,458	917,771					
Memphis	85,000	35,000	3,250,000	Twenty-eighth to I	hirty-se	cond,	1843	-58, 52 and
Milwaukee	210,000	115,719 48,323	0,014,000	223; Thirty-third t and 237; Thirty-eig 73, 76 and 293; For 1873–83, 76 and 293 1883–89, 76 and 325.	o Inirty	Forts	itn,	1803-03, 00 ond 1863-
Minneapolis Mobile	232,000 43,000	81 905	6,415,500 2,300,000	73. 76 and 293: For	tv-third	to F	orts	z-seventh.
Montgomery	28,000	16,796	722.050	1873-83, 76 and 293	Forty	eightl	to	Fiftieth.
Nashville Newark, N. J	90,000	81,295 16,796 43,548	722,050 2,318,300	1883-89, 76 and 325.	The f	our n	ew S	states add
Newark, N. J	175,000	137,162	9,132,012	eight Senators and	five Re	prese	ntat	ives.
New Bedford	38,000		1,303,207	Att the Presider	te wore	inana		tod on the
New Brunswick Newburgh	20,000 27,000	26,926	1,456,828 300,000	All the Presider 4th of March, exce April 30, 1789; Mo Hayes, March 5; T July 10, 1850; Jol Arthur, Sept., 1881	nt Was	hineta	n (f	irst time).
New Haven	85,000	17,186 62,861	600,000	April 30, 1789; Mo	nroe (s	econd	), Ť	avlor and
New Orleans	255,000	215,289 16,994	600,000 17,009.209	Hayes, March 5; T	yler, Ap	ril 6, 1	841;	Fillmore,
Namton Mago	99, 900	16,994	1 164 OW	July 10, 1850; Jol	nnson,	Aþril	15,	1865; and
New York	1,755,000	1,209,561	101,883,684	Arthur, Sept., 1881				
Norwich, Ct Oakland	25,000 60,000	21,145	924,000 400,000	THE mariner's co				
Omaha.	130,000	30,642	1,661,100	l China, too old to n	ame inv	rentor	or o	late of in-
Oswero	24,000	21,102	1,661,100 862,000 1,500,000	vention. It is kn 2634 B. C., and p	own to	have	bee	n used in
raterson	79,000	50,950	1,500,000	2634 B. C., and p	robably	came	int	o Europe
Pawtucket, R. I	26,000 45,000		1,141,062	through the Arabs	·			

<sup>\*</sup> Net interest bearing debt, \$182,366.

Peoria .....

31,780

1,500,000 1,141,062 636,500

THERE are said to be 6000 lawyers in New York City.

Our Indian Population, Etc.

The Indian population of the United States, by the Report of the Commissioner of Indian Affairs for 1888, exclusive of Alaska Indians, was 246,036. The Five (civilized) Nations, all resident in the Indian Territory, are the Cherokees, numbering 23,300; Choctaws, 18,200; Creeks, 14,200; Chickasaws, 6,100; and Seminoles, 3,050,—shese figures including natives, adopted whites, and freed negroes. Michigan Indians numbered 7,428, mostly Chippewas, Ottawas, and Pottawatomies. Of all the Indians except the Five Nations and Alaskans, 62,517 wore citizen's dress wholly and 33,533 partly; 22,710 could read, and 25,578 use English enough for ordinary purposes; 1,922 were church members, with 188 church buildings, and 17,016 dwelling-houses were occupied by Indians. There are 59 Indian agencies and 10 Government training-schools for Indians, of which the most famous is that at Carlisle, Pa. There is also an Indian department in the celebrated Hampton (Va.) Normal and Agricultural Institute, with 121 students in 1888. The reservations numbered Sloux reservation in South Dakota, amounting to about 11,000,000 acres, has since been vacated, and will soon be thrown open to settlement. The reservations in Michigan are the Isabella, in Isabella county, 7,817 acres; and the L'Anse, 19,324, and Ontonagon, 678 acres, in the Upour Peninsula.

the L'Anse, 19,324, and Ontonagon, 678 acres, in the Upper Peninsula. Gen. O. Howard has recently published a census of the Indians by States and Territories, excluding Alaska, as follows: Arizona 21,163, California 11,409, Dakota 31,409, Idaho 4,276, Indian Territory 83,234, Iowa 534, Kansas 978, Michigan 7,577, Minnesota 5,287, Montana 14,778, Nebraska 3,602, New Mexico 30,003, New York 5,007, North Carolina 3,100, Oregon 5,055, Texas 387, Utah 2,609, Washington Territory 10,996, Wisconsin 7,898, Wyoming Territory 1,855, Florida (Seminoles and Indian Territory) 292, Maine (Oldtown Indians) 410, Nevada 8,316; total, 262,620.

When the late Slour reservation in South Dakota is fully opened to zettlement, it will

When the late Sioux reservation in South Dakota is fully opened to cettlement, it will accommodate about 70,000 families, allowing each 160 acres. Approval of the Commissioners' proceedings by Congress and some additional legislation this winter are necessary, when the land can be entered. For all taken by actual settlers within the first three years, the price will be \$1.25 per acre; within the next two years, 75 cents; and the remainder, within ten years, 50 cents. The soil is reported as mainly a rich, dark drift of alluvial loam, with clay subsoil also of drift formation.

The first issue of Confederate paper money commanded a slight premium, but it soon began to depreciate on a scale about as follows, as measured by Federal money: June, 1861, 90c.: December 1, 1861, 80c.: December 15, 1861, 75c.: February 1, 1862, 60c; February 1, 1863, 20c.; June, 1863, 8c.: January, 1864, 2c.; November, 1864, 4½c.: January, 1865, 2½c.; April 1, 1865, 1½c. After that date, it took form \$800 to \$1,000 in Confederate money to buy a \$1 greenback. There was also a small coinage of Confederate silver dollars, which soon disappeared from circulation, and specimens are now valued at \$1,000 apiece by coin collectors.

The year 1887 touched high-water mark for railway construction in this country, at 18,000 miles. Other great railroad building years were: 1871, 7879 miles; 1881, 9756; 1882, 11,569; and 1888, 7120.

The Federal census of 1790 (the first) anowed but 18 cities with over 5,000 inhabitanta, and none with more than 40,000. In 1880 400 exceeded 5,000 each, 40 exceeded 40,000, and 20 100,000. It is believed there are now at least 80 of the last (the Yrar Boox of last year showed 28). In 1790 the percentage of inhabitants of cities of 8,000 and over to total population was 3.3, in 1840 8.5, in 1880 22.5. Probably more than one-fourth now live in such cities, and the tendency to remove from the rural districts thither is still strong. In England and Wales, in 1881, more than one-third of the population was centered in 28 cities of population each exceeding 70,000,—in all 9,310,838. A comparative view of 15 of our largest cities, as between 1860 and 1875, shows an increase in population of 70.5 per cent; of taxable valuation, 1863,; of public debt, 270.9; and of taxation, 363.2.

The Yosemite National Park, California, comprises the Yosemite Valley with the big trees, and is fifteen miles long by two wide. The Yellowstone National Park is mostly in the extreme northwest corner of Wyoming Territory, easily accessible from the Northern Pacific Railroad, and is 65 miles long by 55 wide, or 3575 square miles in area. Professor Hayden, the eminent Government geologist, reported that no other tract of similar size on the globe contains so many wonderful objects in nature. It has more hot springs and geysers, for instance, than all the world besides. The National Park and military reservation at Mackinac Island include about 900 acres, and are mainly notable for the superb land and water views which they command.

During the first 70 years of our Government only 55 patents in all were granted to women; but in 1887 alone 188 were issued to the vex, and now there are over 2000. The first patent given to a woman was in 1800, to Mary Kies, for straw-weaving with silk or thread. The second was issued to Mary Brush in 1815 for a corset. The oldest woman inventor alive is probably Mrs. Nancy M. Johnson, who in 1843 patented an ice-cream freezer and by it made considerable money. Most patents issued to women are in some way connected with their dress or are household labor-saving devices. Few women inventors are from the New England States, and the most of those from Massachusetts.

The portraits upon our postage-stamps are: One-cent, Franklin; 2-cent, Washington, after Houdon's bust; 4-cent, Jackson; 5-cent, Garfield; 6-cent, Lincoln, from Volk's bust; 10-cent, Jefferson, from life-sized statue by Hiram Powers.

TEXAS women are making a gigantic map on cauvas, upon which the name of each of the 264 countfes will be worked with some attractive product of the county. It is to be exhibited at the Texas Spring Palace, Fort Worth.

GORDON's Geographical Grammar, published in London 1719, includes the sage remark concern': ¿l'ennsylvania that "the length of the days and nights is much the same here as in New Jersey."

THERE are said to be but five bed-rooms in the White House, Washington, and 11,000 rooms of all kinds in the Vatican, at Rome.

APPLEMARGARINE, in imitation of apple butter, is an invention of the last year, fitly hailing from Montour Co., Pa.

#### Federal Soldiers' and Sailors' Societies.

HEREDITARY SOCIETIES.

Society of the Cincinnati.—Organized by Washington and other officers of the Revolutionary Army in 1783. Hon. Hamilton Fish, of New York, President.

of New York, President.

Military Order of the Loyal Legion —Organized May 3, 1865, in Philadelphia, exclusively of officers of the army and navy who had served in the War of the Rebellion. Commander, ex-President R. B. Hayes; Recorder, Col. J. P. Nicholson, Philadelphia; State Commander for Michigan, Gen. R. A. Alger, Detroit; Recorder, Maj. Geo. W. Chandler, Detroit. troit.

Sons of Veterans.—Organized in Philadelphia in 1878. Members must be over 18 years of age, and members' sons of such age are also entitled to membership. Commander-inchief, Charles F. Griffin, of Indiana; Colonel of Michigan Division, Frank M. Williams, Grand Rapids; Adjutant, Geo. E. Cogshall, Grand Rapids.

Grand Rapids.

#### SOCIETIES NOT HEREDITARY.

Grand Army of the Republic.—First Post formed at Decatur, Ill, April 6, 1866; first National Encampment at Indianapolis in November, 1866. Commander-in-chief, Gen. Russell A. Alger, of Michigan; Adjutant-General, Maj. Geo. A. Hopkins, of Michigan; headquarters in Detroit. Commander Department of Michigan, Michael Brown, Big Rapids; Ass't Adjutant-General, N. H. Vincent Rig Rapids. cent, Big Rapids.

Union Veterans' Union .- Organized 1866; composed of ex-soldiers and sailors at least six months in active service, unless sooner discharged by reason of wounds. Commander-in-chief, Wm. T. Clark; Adjutant-

General, Geo. A. McKay; headquarters at Cleveland, O. Deputy-Commander Michigan Department, James C. Wheeler, Detroit.

Woman's Relief Corps.—First Society in Portland, Me., 1869; first state organization in Negocobusetts 1861. Department

Portland, Me., 1869; first state organization in Massachusetta, 1881. President, Mrs. Annie Wittenmey r., of Permsylvania; President for Michigan, Mrs. Harriett P. Thompson, Flint; Secretary, Mrs. Catherine C. Partridge, Flint. Woman's Veteran Relief Union.—Organized February 27, 1887. President, Mrs. Jacob Campbell, McKeesport, Pa.; for Michigan, Mrs. James Dakin, Saginaw; Secretary, Mrs. Mary Hyer, East Saginaw.

Ladies' Lid Society.—Mrs. W. D. A. O'Brien, President; Lillian Jackson, Secretary,—both of Springfield, O.

Ex-Prisoners of War.—Thos. H. McKee,

or Springheid, U. Ex-Prisoners of War.—Thos. H. McKee, President; L. P. Williams, Secretary-Treasurer, Washington, D. C. President for Michigan, W. H. Beasley, Ithaca; J. L. Richard,

igan, W. H. Beasley, I. Tresident for inclaring and W. H. Beasley, Ithaca; J. L. Richard, Secretary, Pompeli.

Crippled Soldiers' Association.—Jas. A. Underwood, Lieutenant-General commanding, Allegan, Kansas.

Society of the Army of the Potomac.—Organized in New York, July 5, 1889. President, Major-General John C. Parke, U. S. A.; Recording Secretary, Col. H. C. King, New York City. Next meeting at Portland, Maine. Society of the Army of the Tennesse.—Founded at Raleigh, N. C., about April 14, 1985, and composed exclusively of officers. Societies of the Army of the Cumberland, of the Ohio, of Georgia, (all formed in 1889, of the Army and Navy of the Guf. 1889), of the Army of West Virginia (1870), Veteran Signal Corps Association, of the Third Corps, Ninth Corps, etc., etc.

Ninth Corps, etc., etc.

The Federal Armies, Etc.

The Federal
The regular army of the United States was not founded until 1789, and then consisted of but one infastry regiment and one battery, 840 men. Its strength since, until the outbreak of the Rebellion, has been fixed by acts of Congress as follows: 1792, 5120; 1794, 3629; 1801, 5144; 1807, 3278; 1810, 7154; 1812, 11,831; 1815, 9413; 1817-21, 9980; 1822-32, 6184; 1838-42, 12,539; 1843-46, 8613; 1847, 17,812; 1848, 30,890; 1849-55, 10,320; 1856-61; 12,931. The total number of federal troops, regular and volunteer, engaged in the wars of the United States have been: Revolution, 309,781; Indian wars 1790engaged in the wars of the United States have been: Revolution, 309.781; Indian wars 1790-95, 8483; war with France, 1798, 4593 (naval) forces); with Tripoli, 1801-05, 3330 (naval); Creek war, 1813-14, 13,781; with Great Britann, 1812-15, 578,622; Black Hawk war, 1831-32, 6465; Cherokee, 1836-37, 9434; Creek, same years, 13,418; Florida Indian, 1835-43, 41,122; Arostook disturbance, 1838-39, 1500; Mexican war, 1846-48, 112,230; Indian, 1849-55, 2561; Seminole, 1856-38, 2687; Rebellion, 2,772,408. In the last about 600,000 Confederates were

The armies of the United States had killed in action during the Rebellion nearly sixty times as many as during the war with Mexico (1049 against 61.362, besides naval losses), and died of wounds nearly seventy times as many (508 to 34,727, and losses on shipboard 4030 in all, killed and wounded. The Quartermaster-General of the Army reported that he had ter-General of the Army reported that he had (to 1883) under his charge 315,555 graves of Union dead, of which only 172,309 had been identified. The nationality of Federal soldiers in the late war was 75.48 per cent native American, 2.15 British American, 2.26 English, 7.14 Irish, 8.76 German, 2.38 of other foreigners, and the remainder, 1.38, of foreign nationality unknown. The several calls for

Armies, Etc.
troops were: April 15, 1861, for three months, 75,000 (93,326 obtained); May 3, 1861, 82,748, and July 22-5, 1861, 500,000, both for three years (714,231 from both); May and June, 1862, three months, (15,007); July 2, 1862, 300,000, three years (431,595); August 4, 1862, 300,000, nine months (67,588); June 15, 1863, 100,000, six months (16,331); Oct. 17, 1863 300,000, and Feb. 7, 1864, 200,000, three years (234,021); March 14, 1864, 200,000, three years (234,021); April 23, 1864 85,000, 100 days (83,652); July 18, 1864, 500,000, one, two, and three years (204,588). Total called, 2,942,748; total obtained, 2,683,318.

The vote of Nevada has dwindled from 19, 691 in 1876 to 12,596 in 1888, and the population from 62,266 in 1880 to little more than 40,000. Its taxable property now aggregates but \$35,652,000, and it is doubtful whether a State government can be much longer maintained. Union with Utah in the formation of a new State is agitated.

The celebrated Dalrymple farms are in the eastern part of North Dakota, and take their name from the manager and part owner, Oliver Dalrymple, whose home and railway station are on the Northern Pacific, two miles east of Casselton. They are in four greatracts,—the Cheney, Cass, Grandin, and Alton farms, named from original owners,—and all together sum up 100,000 acres, or about 156 square miles.

THE first book issued in this country is believed to have been "An Almanac calcu-lated for New England, by Mr. William Pierce, Mariner," printed at Cambridge by Stephen Daye in 1639. No copy of it is known to be

# Michigan.

#### The State Government, 1890.

STATE OFFICERS. EXECUTIVE -Governor, Cyrus G. Luce, Gilead. Salary,

Lieutenant-Governor, deceased, Wm. Ball acting, Escanaba. Paid legislative per-diem during the session. Secretary of State, Gilbert R. Osmun, De-

troit. Salary, \$800.

State Treasurer, George L. Maltz, Alpena. Salary, \$1000. Auditor-General, Henry H. Aplin, West Bay City. Salary, \$2000.

City. Salary, \$200.
Commissioner of the Land Office, Roscoe D. Dix. Berrien Springs. Salary, \$800.
Attorney-General, Stephen V. R. Trowbridge, Ionia. Salary, \$800.
Superintendent of Public Instruction, Joseph Estabrook, Olivet. Salary, \$1000.
Regents of the University.—Arthur M. Clark, Lexington, term expires Dec. 31, 1891; Charles R. Whitman, Ypsilanti, 1893; Dr. Herman Kiefer, Detroit, 1893; Roger W. Butterfield, Grand Rapids, 1895; Charles Hebard, L'Anse, 1895; Charles S. Draper, East Saginaw, 1897; Wm. J. Cocker, Adrian, 1897.
State Board of Education.—Perry F. Powers, Cadillac, term expires Dec. 31, 1894; James M. Ballou, Othergo, 1890; Samuel S. Baboock, Detroit, 1892; Secretary, ex officio, Joseph Estabrook, Olivet.

JOSEPH ESTADFOOK. OHIVET.

JUDICIARY — SUPREME COURT.

Chief Justice, John W. Champlin, Grand Rapids, term expires Dec. 31, 1891.

Associate Justices.—Allen B. Morse, Ionia, term expires Dec. 31, 1893; James V. Campbell, Detroit, 1895; Charles D. Long, Flint. 1897; Claudius B. Grant, Houghton. 1899. Clerk, Chus. C. Hopkins, Lansing; Reporter, Wm. D. Fuller, Newaygo. The salary of each Justice of the Supreme Court is \$5000, and of the reporter, \$1500. The clerk receives fees. The court holds four terms annually in Lansing, commencing on the first Tuesday after the first Monday in January. April, June, and October. Monday in January, April, June, and October.

CIRCUIT JUDGES.

1. Victor H. Lane, Adrian.

2. Thomas O'Hara, Berrien Springs.

8. Geo. Gartner. Henry N. Brevoort, Cornelius J. Reilly, Geo. S. Hosmer, all of Detroit.
4. Erastus Peck, Jackson.

4. Erastus Peck, Jackson.
5. Frank A. Hooker, Charlotte.
6. Joseph B. Moore, Lapeer.
7. William Newton, Flint.
8. Vernon H. Smith, Ionia.
9. George M. Buck, Kalamazoo,
10. Chauncey H. Gage, Saginaw.
11. John A. Edgett, East Saginaw.
12. Joseph H. Steere, Sault Ste. Marie,
13. William D. Williams, Marquette.
14. J. G. Ramsdell, Traverse City.
15. Albert Dickerman, Muskegon.

J. G. Ramsdell, Traverse City.
 Albert Dickerman, Muskegon.
 Noah P. Loveridge, Coldwater.
 Arthur N. Canfield, Mt. Clemens.
 William E. Grove, Grand Rapids.
 George P. Cobb. Bay City.
 J. Byron Judkins, Hersey.
 Dapiel J. Arnold, Allegan.
 Henry Hart Midland City

23. Henry Hart, Midland City.
24. Edward D. Kinne, Ann Arbor.
25. William H. Simpson, Au Sable.
25. Watson Beach, Lexington.

Vacancy.]
Robert J. Kelley, Alpena.
John H. Palmer, Big Rapids.

Fred H. Aldrich, Cadillac.

THE LEGISLATURE -- 1889-90.

SENATE.

1st District-Joseph Nagle, D., Detroit. 1st District—Joseph Nagie, D., Detroit.
2d—Theodore Rentz, D., Detroit.
3d—Anthony Grosfield, D., Detroit.
4th—James S. German, D., Chelsea.
5th—Arthur D. Gilmore, R., Blissfield.
6th—Adelbert R. Chapman, R., Reading.
7th—Miland Milane, D. Coldwater. Alfred Milnes, R., Coldwater. 7th 8th-[Vacancy.] W. Irving Babcock, R., Niles. 9th-9th—W. Irving Baucous, 12, 11000 10th—[Vacancy.] 11th—Philip T. Colgrove, R., Hastings. 12th—John Holbrook, R., Lansings. 13th—William Ball, R., Hamburg. 14th—Franklin B. Galbrath, R., Pontiac. 14th—Franklin B. Galbrath, R., Pontiac.
15th—J E. Barringer, D., Armada.
16th—Robert L. Taylor, R., Lapeer.
17th—Edwin G. Fox, R., Mayville.
18th—Chauncey W. Wisner, D., E. Saginaw.
19th—William Toan, R., Portland.
20th—Sybrant Wesselius, R., Grand Rapids.
21st—Jacob Den Herder, R., Zeeland.
22d—T. S. Gurney, R., Hart.
22d—Lawis G. Palmer, R., Bic Rapids. 2:d—T. S. Gurney, R., Hart.
23d—Lewis G. Palmer, R., Big Rapids.
24th—E. B. Green, R., Alma.
25th—[Vacancy.]
26th—Andrew Harshaw, D., Alpena.
27th—John G. Berry, R., Vanderbilt.
28th—J. W. Giddings. R., Cadillac.
29th—Roswell Leavitt, R., Bellaire.
30th—A. O. Blackwell, R., Gladstone.
31st—[Vacancv.]
32d—Thomas B Dunstan, R., Hancock.
Republican, 21; Democrat, 7; majority, 14.

HOUSE.

ALLEGAN.—G. M. Baldwin, R., Hopkins Station; S. S. Stout, R., Allegan. MONTMORENCY, OTSEGO.-Edward

ALPENA, MONTMOR K. Potter, R., Alpena

BARRY.—Jeremiah M. Rogers, R., Hastings. BARY.—John Briske, D., Bay City; Alexander Zagr-Imeyer, R., West Bay City. BERRIEN.—William A. Baker, R., Coloma;

O. E. Aleshire, D., Buchanan. Branch.—A. A. Van Orthwick, R., Quincy. Calboun.—[Vacancy.] Henry C. Hall, R., Battle Creek.

CA-s.-Edward R. Spencer, R., Dowagiac. CHARLEVOIX: ANTRIM, MANITOU.—William Harris, R., Norwood

CHEBOYGAN, EMMET, PRESQUE ISLE.—Philip B. Wachtel, D., Petoskev. CHIPPEWA, ALGER, LUCE, MACKINAC, SCHOOL-CRAFT.—Michael Chambers, D., St. Ignace.

CLINTON.—Cyrus Sherman, R., Ovid. DELTA, IRON.-A. R. Northrup, R., Esca-

EATON.—Walter W. Williams, R., Eaton Rapids; Alden B. Swift, R., Kalamo. GENESEE.—H. R. Dewey, R., Grand Blanc;

J. W. White, R., Clio.
GRAND TRAVERSE, KALKASKA.—Jacob Tinklepaugh, R., Kalkaska.

GRATIOT.—Henry L. Wood, R., St. Louis, Hillsolle.—Avery A. Smith, R., Hillsdale; Lucius E. Russ, R., North Adams, HOUGHYON.—Harry C. Southworth, R., Han-

HURON.—August Heineman, D., Port Hope. INGHAM.—A. F. Ferguson, D., Okemos; C. C. Fitch, D., Mason. Iowia.—H. W. Browne, R., Hubbardston; Willard Hawley, R., Seranac. IOSCO, ALCONA, ARENAC.—[Vacancy.]

ISABELLA.-Wallace W. Preston, R., Mt. Pleasant.

-John W. Watts, R., Jackson; JACKSON.-John E. Tyrrell, R., Jackson. Kalamazoo.—John J. Lusk, R., Kalamazoo;

ALLANZOO.—John J. Liusk, R., Anakmazoo;
John W. Kirby, R., Galesburg.
KENT.—John Killean, D., Frank H. Gill, D.,
Grand Rapids; George E. Judd, R., Cascade;
Neil McMilian, R., Rockford.
LAPBER.—John L. Preston, R., Columbiaville; Thomas C. Taylor, R., Almont.
LERLANAW, BENZIE.—Charles W. Williams,
B. Kasson

R., Kasson.

Lenawer.—Miner T. Cole, R., Palmyra,
John W. Dalton, R., Adrian; Adrian O. Abbott, R., Hudson. LIVINGSTON.-Solomon L. Bignall, D., Fowl-

erville. MACOMB.—Lucius H. Canfield, D., New Ha-

ven: Harvey Mellen, D., Romeo.

Manistez.—William Probert, D., Bear Lake.

Manguerre.—George Wagner, R., Mar-

quette; Henry Rauthier, R., Ishpeming. MASON.—Daniel Austin, D., Ludington. MECOSTA—Frank Morton, R., Lakeview.

MENOMINEE.-Byron S. Waite, R., Menominee.

MIDLAND, CLARI bury, R., Midland. CLARE, GLADWIN.-A. D. Salis-

MONROE.-Samuel P. Jackson, D., Monroe;

Charles Angerer, R., Scofield.

MONTCALE -Norris J. Brown, R., Stanton; Henry Watson, R., Greenville.

MUSKEGON.—William H. 1

H. McKinstry, D.,

MUSKEGON; Robert Robinson, R. Trent.
NEWAYGO.—David Collins, R., Croton.
OAKLAND.—James H. Peabody, R., Birmingham; David Hobart, R., Holly.
OCEANA.—Daniel W. Crosby, R., Elbridge.
OGEMAW, CRAWFORD, OSCODA, ROSCOMMON.—
Stanley W. Turner, R., ROSCOMMON.—
Stanley W. Turner, R., ROSCOMMON.—
ONTONICON RAPAGA, ISLE, ROYAL, KEWEE.

ONTONAGON, BARAGA, ISLE ROYAL, KEWEE-NAW, GOGEBIC.—Charles A. Hanscom, R., Ironwood.

OSCEOLA, MISSAUKEE.—[Vacancy.]
OTTAWA.—G. J. Diekema. R., Holland; J. V.
B. Goodrich, R., Cooperaville.
SAGINAW.—Fred W. Hollister, D., Saginaw;
Rowland Conner, D., East Saginaw; Hiram
W. Robinson, D., Bridgeport; John A. Mc-

Gregor, R., Freeland.
Sanilac.—George Hinkson, Jr., R., Amadore; Richard D. O'Keefe, R., Carsonville.
Shiawasser.—James B. F. Curtis, R., New

Lothrop; [vacancy.] St. Ciair.—Frederick Lindow, D., Marine City; Joseph Gibbons. D., Blaine. St. Joseph.—Russell R. Pealer, R., Three Rivers.

Rivers.
Tuscola.—John A. Damon, R., Millington;
William McKay, R., East Dayton.
Van Burrn.—Charles L. Eaton, R., Mattawan; Millan Wiggins, R.. Bloomingdale.
Washtenaw.—John V. N. Gregory, D., Dexter; James L. Lowden, D., Ypsilanti.
Wayne.—W. W. Wheaton, D., James A.
Randall, D., Patrick Dee, D., Georre Huebner, D., Adolph Jasnowski, D., Ivacancyl, August Wetlaufer, D., Detroit; T. J. Wells, R.. Hamtramck; Theodore E. Demming, R., Wayne; H. L. Stoflet, R. Belden. H. L. Stoflet, R. Belden. WEXFORD, LAKE.—Sylvanus Alexander, R.,

Wexford.

Republican, 66; Democrat, 29; majority, 87.

#### MILITARY DEPARTMENT.

Cyrus G. Luce, Governor and Commanderin Chief, Lansing.

Daniel B Ainger, Brigadier General and Adjutant General, Charlotte. Frank D. Newberry, Brigadier Gen**eral a**nd Inspector General, Coldwater.

George M. Devlin, Brigadier General and Quartermaster General, Jackson. E. William Cobb, Colonel and Paymaster

General, Adrian.

William W. Cook, Lieutenant Colonel and Assistant Adjutant General, Lansing. and Assistant

Edward Douglass, Major Inspector General, Houghton. La Fayette Harter, Lieutenant Colonel and

Assistant Quartermaster General, Detroit. E. Crofton Fox, Colonel and President State

Military Board, Grand Rapids. Fred E. Farnsworth, Colonel and Treasurer State Military Board, Detroit.

James N. Cox, Colonel and Aide-de-Camp to the Commander in Chief, Calumet. Frank J Haynes, Colonel and Aide-de-Camp

to the Commander-in Chief, Port Huron

Sidney R. Dixon, Colonel and Aide-de-Camp to the Commander-in-Chief, Detroit. Joseph W. Kerns, Colonel and Aide-de-Camp to the Commander in Chief, East Saginaw.

Milo D. Campbell, Major and Military Secretary, Lansing.
Robert S. Pratt, Major and Judge Advocate,

Bay City.

FIRST BRIGADE.
Charles S. Brown, Brigadier General, Flint.
J. Leverett Willett, Lieut. Colonel and A. A.
G., Flint.

Edward D. Ellis, Lieut. Colonel and A. I. G.,

Grand Rapids.

George T. Warren, Lieut. Colonel and A. Q.
M. G., Flint. James B. Book, Lieut. Colonel and Surgeon,

Detroit. Daniel C. Sauer, Capt. and A. D. C., Jackson. Fred S. Norcross, Captain and A. D. C.,

Menominee.

enominee.

FIRST REGIMENT—Field and Staff.
Elmer W. Bowen. Ypsilanti. Colonel.
John E. Tyrrell, Jackson, Major.
Charles M. Woodward, Tecumseh, Surgeón.
Elden W. Hills. Ann Arbor, Ass't Surgeon.
Elbridge W. White, Jackson, Chaplain.
Robert Darnton, Adrian, First Lieutenant

John W. Barry, Jackson, First Lieutenant and R. Q. M.

SECOND REGIMENT—Field and Staff. Edwin M. Irish. Kalamazoo, Colonel. Wm. T. McGurrin, Grand Rapids, Lieut. Col. Charles H. Rose, Grand Rapids, Major. Wm. F. Hake, Grand Rapids, Surgeon. Irwin Simpson, Kalamazoo, Asa't Surgeon. Abner L. Frazer, Jr., Kalamazoo, Chaplain. Harry W. Bush, Kalamazoo, First Lieut.

and Adjutant.

Wm. L. White, Grand Rapids, First Lieux and R. Q. M.

THIRD REGIMENT -Field and Staff, Charles R. Hawley, Bay City, Colonel, Frank B. Lvon, Calumet, Lieut, Colonel, Cyrus C. Yawkey, East Saginaw, Major. Arthur Wikinson, Alpena, Surgeon. Eugene W. Davis, Saginaw, Asst Surgeon Henry M. Curtis, Flint, Chaplain. James A. McKay, Bay City, First. Lieut. and Adjutant,

Fred A. Aldrich, Flint, First Lieut. and

R. Q. M. FOURTH REGIMENT—Field and Staff. Eugene Robinson, Detroit, Colonel George W. Corns, Detroit, Lieut. Colonel. John E. Clark, Detroit, Surgeon.

W. F. H. Edwards, Detroit, Ass't Surgeon John Munday, Detroit, Chaplain. Charles E. Locke, Detroit, First Lieut, and Adjutant.

Jul. A. Suckert, Detroit, First Lieut. R. Q. M.

# Presidential Elections in Michigan.—1884 and 1888.

		1884	1.		. 1888.					
		A \		ρi	జ	A		,		
Counties.	డ	Cleveland,	æ			Cleveland,	a;	i,g	Totals.	
	ine,	rela	ler,	John	Harrison,	vele		ret i.		
	Blaine,	Cle	Butler,	St.	Hau	Cle	Fisk,	Streeter, Un. Lab.	1888.	
Alcona	545	329	9	1	645	502	7	6	1.158	
Alger	4,080	2,810	760	927	284 5,078	162 <b>8</b> ,829	10 721	185	456 9,763	
Alpena	927 1,066	924 864	198 855	59 87	1,486 1,305	1,504 881	118 114	44	3,152 2,300	
Arenac	323	17	531	44	857	261	41	462	1,121	
Baraga	396 2,699	807 1,150	1,927	401	889 8,212	406 2,676	891	167	799 6,446	
Arenac Baraga Barry. Bay. Benzie	2,916 556	8,436 245	1,534 135	161 77	4,378 710	5,386 412	121 94	127 17	10,012 1,238	
Benzie Berrien. Branch Calboun. Cass. Charlevoix Cheboygan. Chippewa. Clare. Clinton Crawford Delta	4,445	4 030	427	845	5.128	4,689	468	29	10.314	
Branch	8,671 5,113	1,315 4,693	1,644 644 223	419 564	4,098 5,734	4.3.8	503 613	63 159	7, 03 10,862	
Cass	5,118 2,764	4,693 2,527 401	2:23 469	216 56	2,929 1,270	2,564 874	282 95	11	5,786 2,240	
Cheboygan	1,043 777	577	811	40	1.110	1,237	76	8	2,431	
Chippewa	696 622	635 503	271	21 84	1,0.5 905	909 912	82 57	12	2,046 1,886	
Clinton	2,782	2,418 178	814 45	815	3,493 436	2,248 479	848 9	91 1	7,180 925	
Delta	304 1,201	609		6	1 587	1.832	11		1,930	
Eaton	4,106 779	2,818 587	911 810	494 105	4,624	3,266 1,056	607 106	876	8,873 2,108	
Genesee	4,328 288	8,158 208	560 19	1,005	5,404 525	3,904 857	836	20 2	10,164 893	
Gogebic					1,367	1,112	86		2,515	
Grand Traverse	1,645 2,676	549 1.526	257 1,207	94 283	1,859 8,667	925 2,854	154 416	- 8 68	2,946 7,005	
Hillsdale	4.815	2 024	1,295	629	4,959	8,035 2,696	564 185	140	8,700 5,892	
Houghton	2,383 1,535	1,692 1.454	444	39 179	8,012 1,608	1.988	206	857	4,659	
Delta Eaton Emmet Genesee Gladwin Gogebic Grand Traverse Gratiot Hillsdale Houghton Huros Huros Ingham Ionia Losco Irou Isabella Jacksen	8,709 3,552	8,272 2,728	1,292 1,084	479 503	4.547 4.436	4,782 8,779	507 482	112 9	9,948 8,706	
Iosco	1,016	844	124	43	1,503	8,779 1,639 520	114 2	58	3,311 1.120	
Isabella	1,617	1,033	581	83	2,154	1,841	175	16	4.186	
Jackson	4,804 4,515	4,888 8,452	1,060 398	645 455	5,646 5,487	5,170 3,950	586 522	164 38	11,566 9,947	
Jacksen Kalamazoo Kalkaska Kent Keweenaw	630	182	188	35 1,040	799	400	77 1,252	5 2	1.289	
Keweenaw	9,007 920	6,902 201	2,755	12	12,811 411	11,864 185	4		15,920 600	
LakeLapeerLeelanawLenaweeLivingston	951 3.061	447 2,499	209 240	100 276	1,061 8,662	807 2,914	86 262	2 25	1,956 6,863	
Leelanaw	811	485 5.271	94 300	21 1,097	899	673	48 916	21	1,610 13,083	
Livingston	5,827 2,597	2,621	816	272	6,475 2,706	5,671 2,842	348	119	6,015	
Luce	479		15	3	212 625	172 913	12 15		396 1,553	
Macomb	2,782 1,305	8,330 1,223	180	223 162	8,245	3,708	217 212	8 44	7,173 4,252	
Manistee	1,805	148	706		1,668 8	2,328 141	<b>.</b>		143	
Marquette	4,230 1,299	1,467 1,011	12 211	48 57	4,512 1,697	2,105 1,573	244 67	4	6,86. 3,341	
Mecosta	2,365 2,614	1,166 918	683	187 25	2,604	1,793 2,238	833 96	10 48	4,740 5.528	
Midland	1,071	457	14 899	44	8,156 1,336	1,148	127	83	2,694	
Missaukee	470 8,025	294 8,785	76 190	26	632 8,430	572 8,940	47 182	2 15	1,253 7,567	
Montcalm	8,857	2,296	1,50%	178	4,480	8,495	872	46	8,393	
Manitou Marquette. Mason Mason Mecosta Menominee Midland Missaukee Mouroe. Montcalm Montcalm Monternery Muskegon Newaygo Oakland Oceana Ogemaw Osemaw Osemagon Decola	93 3,483	2,119	89 1,042	817	235 4,521	237 8.514	9 396	191	281 8.6.2	
Newaygo	1,971 4,842	995 5,101	1,056 315	203 522	2,448 5,889	1,982 5,410	241 589	100	4,721 11,390	
Oceana	1,637	661	552	357	1,726	1.426	434	23	8.609	
Ontonagon	478 801	875 238	101	16 24	620 308	579 542	82 2	49	1,280 852	
Decola Decola Decola Diagona D	1,497 199	678 57	114 80	273	1,882 277	1,090 299	820 11	9	3,301 587	
Dtaego	485	197	218	21	578	484	64 268	14	1,085 7,818	
Treame Isle	8,758 894	2,890 202	6ó9 28	281	4,802 408	3,191, 484	11	57	903	
Bo common	427	409	26	2	860	858	1	1	720	

PRESIDENTIAL ELECTION - Continued.

		188	4.		1888.				
Counties.	Blaine, R.	Cleveland, B.	Butler, G.	St. John, P.	Harrison, R.	Cleveland, D.	Fisk, P.	Streeter, Un. Lab.	Totals, 1888.
Saginaw  8t. Clair.  8t. Joseph. Sanilac Schoolcraft. Shiawassee. Tuscola Van Buren. Washtenaw Wayne. Wexford.	518 2,705 2,914 4,219 4,049	6.286 8,583 2,527 1,043 289 1,671 2.086 4,983 18,794 682	1.075 1,002 1,029 777 7 1,471 587 845 832 2,056 253	. 205 848 133 165 22 623 8:2 861 617 703 180	6,728 2,940 590 4 007 5,419 8,372 3,888 4,783 4,549 21,326 1,487	8,928 2,434 589 8,187 5,286 3,217 8,112 2,986 5,482 25,980 1,065	825 245 55 513 826 180 295 458 548 877 160	54 72 12 20 208 72 13 14 28	16,025 5,691 1,234 7,719 11,051 6,972 7,367 8,240 10,588 48,212 2,63
Totals	192.669	149,835	41.490	18,403	236,387	218,449	20,945	4,555	475.356

Blaine's plurality over Cleveland, 42,834. A fusion arrangement, however, was made between the supporters of Cleveland and Butler, by which their united vote was counted as 189,361, and Blaine's plurality reduced to 3,308. Harrison's plurality over Cleveland, 22,918.

	State	Electi	on for	Govern	or—188	4 to 18	88.		
		1884.			1886.			1888.	
Counties.	Alger. R.	Begole. F.	Preston, P.	Luce, R.	Yaple, D. & G.	Dickie, P.	Luce, R.	Bart, D.	Cheney,
Alcona	617	266	1	856	297	1	650	498	6
Alger			••••	247	95	22	269	177	10
Allegan	4,053	8,887	1,004	8,671	2,934	860	5,084	8,838	722
Alpena	1,077	1,016	56	1,119	1,256	119	1,497	1,500	111
Antrim	1,046	726	51	906	522	64	1,310	879	112
Arenac	814	586	56	262	551	18	850	272	40
Baraga	401	297	أخفذ	849	858	6	884	412	4
Barry	2,672	2,944	420	2,675	2,565	600	8,246	2,679	870
Bay	2.930	4,683	207	2,957	4,305 406	182 108	4,364 720	5,422 406	114 90
Benzie	558	874	81 870	521 4.262	8,78	534	5,100	4,725	• 462
BerrienBranch	4,410 8,493	4,450 8,009	525	8,525	2,767	553	4.070	2,787	451
Colbour	4 979	4,815	690	4,145	8,439	964	5,770	4.879	568
Calhoun	2,727	2,761	230	2,576	2,471	380	2,927	2,572	279
Casa Charlevoix	1.072	879	67	1,044	778	157	1,285	862	94
Cheboygan	776	902	44	714	1,031	54	1,100	1,245	76
Chippewa	678	638	28	677	816	84	1.062	1,908	79
Clare	<b>C</b> 14	684	44	509	641	89	915	906	44
Clinton	2,616	8,202	403	2,996	2,953	45	8,507	8,946	836
Crawford	309	219	200	238	253	14	487	478	8
Delta	1.198	618	6	921	785	19	1.582	1.885	11
Eaton	4,103	8,678	543	8,903	8.877	890	4,649	8,279	588
Emmet	767	892	124	798	827	128	965	1.049	102
Genesee	4.117	8,760	1,108	4.517	8,021	1,104	5,408	8,918	817
Gladwin	296	194	-,,,,,,	297	174	40	515	867	9
Gogebic							1.361	1,116	86
Grand Traverse	1.569	838	128	1.328	624	178	1,856	996	154
Gratiot	2,678	2,707	812	2.912	2,603	828	8,710	2,854	389
Hillsdale	4,260	8.166	750	4,368	2,774	706	4.952	8.068	500
Houghton	2.841	1.660	72	2,298	1.844	44	2,961	2,741	181
Huron	1.847	1,884	197	1,518	1,780	402	1.666	1,995	191
Ingham	8,494	4.862	63 i	8.698	4,077	905	4.591	4,767	496
Ionia	8,494	8,715	684	8,572	8.915	507	4,447	8,790	467
losco	1,071	807	89	895	1,085	260	1,501	1,642	114
ron	• • • • • • •		•••••	797	474		(05	594	9
abella	1,605	1,604	99	1,659	1,599	194	2,156	1,846	178
Jackson	4.784	5,8:6	760	4,754	4,486	839	5,650	5.941	585
Kalamazoo	4,421	8,784	491	4,298	8,666	570	5,408	8,981	585 130 79 1,988
Kalkaska	619	871	45	590	802	81	790	407	
Kent	8,848	9,684	1,166	7,768	8,670	1,581	12,798	11,816	1,755
Keweenaw	623	202	12	398	187	100	414	160	
Lake	833	671	113	877	716	139	1.046	7,000	- ₹
Lapeer	8,010	2,722	860	2,888	2,450	844	8,698	X MA	7
Leelanaw	864 5,690	576 5.418	24 1,406	5,523	489	41	898	. 95	
Lenawee	5,090)	0,418)	1,4001	0,0231	5,010	1,087	6,448	5,400	

STATE ELECTION FOR GOVERNOR - Continued.

•		1884.			1886.		1888.			
Counties.	er, R.	Begole, F.	Preston, P.	ę.	Yaple, D. & G.	å.	e, B.	t, D.	Cheney, P.	
	Alger,		£	Luce,	Ya.	Dickle, P.	Luce,	Burt,		
Livingston	2,705	2,852	805	2,459	2,784	508	2,697	2,857	848	
Luce	480	557	2	490	591	42	213 627	171 910	11 18	
Macomb	2,772	8,438	254	2,469	8.016	266	8,202	8,739	214	
Manistee	1,827	1,877	190	1,193	1.744	242	1,675	2,3081	200	
Manitou	18	148	•••••	222	72	•••••	8	1:40	•••••	
Marquette	4,249	1,446	86	8,118	1,599	80	4,398	2,204	244	
Mason	1,209	1,238	••••	1,804	1,091	58	1,706	1,575	.58	
Mecosta	2,840	1,819 952	24 26	2,049	1,444	288	2,681	1,777	821	
Menominee	2,586 1,068	802 875	20 46	1,687 1,038	2,118 1,125	72 182	8,151 1,270	2,325 1,158	98 117	
Midland	1,000	870	84	482	510	83	636	578	46	
Monroe	8.075	8,786	205	2.547	8.095	272	8,882	8.976	187	
Montcalm	8,849	8,754	215	8,595	8,285	495	4.491	8,491	863	
Montmorency	90	137	11	127	157	10	235	246	8	
Muskegon	8,428	8,166	881	8,137	2,821	890	4,517	8,486	405	
Newaygo	1,946	2,064	210	1,814	1,696	248	2,470	1,949	238	
Oakland	4,811	5,841	647	4,617	4,842	688	5,436	5,405	554	
Oceana	1,597	1,218	898	1,280	1,135	500	1,718	1,421	448	
Ogemaw	495 298	458 237	17 <b>2</b> 2	520 824	500 765	51	620 309	584	27	
Ontonagon	1.466	768	824	1,234	657	816	1,911	541 1,083	301	
Oscoda	198	188	4	238	264	2	279	295	10	
Otsego	450	418	55	418	464	118	579	484	58	
Ottawa	8,655	8,059	253	8,423	2,689	826	4.814	8,180	258	
Presque Isle	400	222		420	840	9	7879	513	10	
Roscommon	483	481	1	274	327	1	885	884	1	
Saginaw	6,084	6,900	252	5,447	6,728	815	6,544	9,103	298	
Sanilac	4,079	4,568	888	2,312	1,832	<b>30</b> 8	2,950	2,447	228	
Schoolcraft	8,212	8,572	162	542	524	•••	601	580	54	
Shiawassee	1,945	1,755 253	198 14	3,034	2,834	795	4,011	8,200	494	
St. Clair St. Joseph	561 2,659	2,497	789	4,074 3,068	4 468 3,187	469 166	5,822 3,383	5,207 8,211	808 171	
Tuscola	2,918	2,576	369	8.093	2,369	409	3,876	8.126	278	
Van Buren	4.276	2,960	866	8,983	2,698	489	4.812	2,950	440	
Washtenaw	3.934	5,259	782	8,628	4,718	814	4,556	5,478	583	
Wayne	16,827	20,512	1,406	15,892	18,049	918	18,653	28,404	889	
Wexford	1,219	844	192	1,116	782		1,440	1,057	157	
Total	190,840	186,887	22,207	181,471	174.042	25,174	233,595	216,450	20,342	

Mills, Union Labor candidate for Governor, received the following vote: Alcona 6, Allegan 126, Alpena 43, Arenac 458, Barry 153, May 116, Benzie 16, Berrien 29, Branch 47, Calhoun 150, Cass 9, Charlevoix 1, Cheboygan 7, Clare 10, Clinton 83, Crawford 1, Eaton 3:0, Genesee 20, Gladwin 2, Grand Traverse 7, Gratiot 61, Hillsdale 135, Huron 867, Ingham 108, Ionia 6, Losco 51, Iron 1, Isabella 16, Jackson 144, Kalamazoo 31, Kentl. Lake 2, Lupeer 22, Lenawee 22, Livingston 119, Macomb 3, Manistee 43, Mecosta 7, Menominee 48, Midland 76, Mis-suikee 2, Moroco 15, Montcalm 16, Muskegon 202, Newaygo 82, Oakland 2, Oceana 25, Ogemaw 49, Osceola 9, Ote-go 14, Ottawa 63, Biscommon 1, Saginaw 55, Sanilac 69, Shiawassee 12, St. Clair 20, St. Joseph 202, Tuscola 70, Van Buren 8, Washenaw 15, Wayne 23, Wexford 1. Total 4888. The entire vote cast was 475,031, against 380,687 votes in 1886

Cyrus G. Luce, Governor, had a plurality in 1888 of 17,145; James H. Macdonald, Lieutenant-Governor, 20,693; Gilbert R. Osmun, Secretary of State, 22,735; George L. Maltz, State Treasurer, 22,831; Henry H. Aplin, Auditor-General, 23,196; Roscoe D. Dix, Commissioner of Land Office, 23,941; Stephen V. R. Trowbridge, Attorney-General, 22,485; Joseph Estabrook, Superintendent of Public Instruction, 23,282; Perry F. Powers, Member Board of Education, 21,570.

Including its larger water areas, Michigan covers nearly 100,000 square miles.

THE mainlands of Michigan, from the Ohio The mainlands of Michigan, from the Ohio line to Keweenaw Point, lie between 41° 41.52° and 47° 28 68' north latitude. Gull Islet, the northernmost land belonging to Michigan, is in latitude 48° 12.66', and the international boundary in the waters of Lake Superior is still beyond, at 48° 20'. The extreme length of the State is thus about 450 miles. Its extreme bounding meridians are 82° 24.42° and 90° 32', 16° of longitude west from Greenwich or 16 of longitude west from Greenwich, or 5° 21.39 and 18° 29.18' west from Washington, making a total width, from the longitude of Port Huron to that of the mouth of the Montreal River, on the western boundary of the Upper Peninsula, of 8° 7.74', or about 825 miles, a little less than one seventh the entire breadth of the United States on their northern limit, leaving out Alaska and its islands. From the mouth of the Montreal River, at the extreme northwestern corner of the State, to Maumee Bay, at the southeast corner, is 500 miles, almost exactly, as the crow flies. The State is near the geographical center of North America. Its own center, including water areas, is near Provement village and the narrowest part of Carp Lake, Leelanaw county. Its land center is in Richland township, Missaukee center is in Richland township, Missa county, six miles due east of Cadillac. center of the Lower Peninsula is in Coe township, I-abella county; that of the Upper Peninsula in Marquette county, six miles east of Plains Station, on the Chicago & Northwestern Railroad. The State lies in the latitudes of Central and Southern France.

# The Congressional Vote in Michigan-1888.

	FIRST D	ISTRICT.			1	NINTH DIST	TRICT.	
			R.	Conley, P.	COUNTIES.	Cutcheon, R.	Hudson, D.	Ellis, P.
Wayne Co.	. 25,1	79 22,	076	Conley, P. 844	Antrim	1,254	948	93
Plurality	. 3,1	03			Charlevoix . Kalkaska	1,275 787	879 412	87 78
	SECOND	DISTRICT.			Lake	1 069	810	84
COTTO			· 1	Collored D	Manistee		2,803	292 53 333
Hillsdale	Allen, R.	3,03	<i>).</i> I	518	Mason	1,717	1,5.9	53
Lenawee	4,996 6,522	5.66	ia.	864	l Mecosta	2,598	1,799	333
Monroe	8,416	5,66 8,95	3	174	Missaukee	629	577	45 896
Washtenaw.	4,726	5,40	)1	454	Muskegon	4,488	8,711 2,017	229
			-		Newaygo	2,462	2,017 1,458	481
Totals	19,660	18,09	<b>36</b>	<b>2,</b> 0.0	Oceana Osceola	1,718 1,896	1,102	300
Plurality.	1,564				Wexford	1,437	1,071	145
	THIRD D	ISTRICT.						
COUNTIES.	O'Donnell,		e.D	. Bruce.P.	Totals	23,025	18,651	2,476
\Barry	3.2	266 2	.660	369	Plurality			
Branch	4,1 5,8	107 2	,660 ,704	507		TENTH DIS	TRICT.	
Calhoun	. 5,8	376 <b>4</b>	,217	618	COUNTIES.	Wheeler, R. 667	Fisher, D. F	uiton, P.
Eaton	4,6	578 8	,223	597	Alcona	1,495	1,486	08
Jackson	. 6,1	175 4	,689	523	Arenac	393	816	36 54 68
Motela	24,0	207 17	405	2,609	Bay		5,493	54
Totals Plurality	. 24,0	302 17	,495	2,000	Chebovgan	1.090	1,265	68
I Ittianity	. 0,0	NA.			Clare Crawford	980	851	48
	FOURTH 1	DISTRICT.			Crawford	447	471	90
•	Burrows.	, Maynar	d.	Comings,	Emmet	915	1,100	80
COUNTIES.	R.	n		P	Gladwin	568	306	. 8
Berrien	5,189	4,6	92	<b>46</b> 8	Iosco		1,584 208	84
Cass	2.918	4 2.5	81	*212	Montmorence Ogemaw		551	1 11
Kalamazoo	5,479	8,9	29	518	Oscoda		291	11
St. Joseph		8,2		167	Otsego		430	9 49
Van Buren	4,740	3 8,0	34	439	Otsego Presque Isle	412	479	10
Totals	21,649	17,4	R4	1,587	Roscommon	407	808	1
Plurality		,-	~-	2,001	Tuscola	8,809	3,233	251
						40.070	10.044	
	FIFTH D		_		Totals	18,959 115	18,844	824
COUNTIES.	Belknap, I	R. Ford, D	<u>.</u> G	odfrey, P.	Plurality	ELEVENTH DI	SALD LAL	
Allegan	5,0	24 4,06	107 107	872	COUNTIES, Sta	ephenson.R. I	Power, D. Dov	wning.P.
Ionia Kent	4,4 12,5	42 3,86 66 12,39	žé	932	Alger	ephenson, R. I 286	160	10
Ottawa		77 2,71	5	193	Baraga	882	418	
0.000			_		Benzie	710	410	98 80 9
Totals	. 26,30	09 28,64	2	2,057	Chippewa	996 1,295	951 1,600	ωV
Plurality	2,6	87			Delta	1,280	1,156	157
	SIXTH D	TOTOTOT			Gogebic G'dTraverse	1,812 1,852	932	26
			. т	Doct D	Houghton	2,838	2,843	157 36 196
COUNTIES.	Brewer, R	Barnes	, D.	Root, P. 299	Iron	474	646	
Clinton Genesee	3,43 5,50 4,31	6 8	,389 ,933	705	Keweenaw	408	192	····;
Ingham	4.81	1 5	,104	458	Leelanaw	871	692	49 12
Livingston	2,63	3 2	968	299	Luce	211	172	12
Oakland	5,89		,510	490	Mackinac	603 5	929 116	14
					Manitou Marquette	4,230	2,249	363
Totals		1 20	,904	2,251	Menominee.	3,038	2,320	117
Plurality	. 86	7			Ontonagon.,	290	556	2
	SEVENTH	DISTRICT.			Schoolcraft.	540	641	52
COUNTIES. Huron Lapeer Macomb	Whiting, D	. Hartsuff	R.	Ingalls,P.				
Huron	2,02	8 1,	548	178	Totals	20,336	16,978	1,198
Lapeer	2,97	5 8,	646	218	Plurality	3,358	D	03
Macomb	8,79	3 8,	183	189	digtriot 1 56	nai piuranine	s: Republ	Can—zu
Daumac	æ,000	, °,	ow	EI3	6th 267 9th	9 085 · Oth 4	974 100 U	15 · 11th
St. Clair	5,56	s 5,	206	246	3.358:—total.	0,000 nal pluralitie 1; 3d, 6,602; 4 2,085; 9th, 4 25,817. Dem 6;—total, 3,50 the Congress	ocratic—1st	district.
Totals	16,89	1 16	488	1,037	3,103; 7th, 40	6;—total, 3,50	9. Net Re	oublican
Plurality	406	;,	-00	2,00.	plurality on	the Congress	ional vote, 2	,808.
					I Transferrance	ICCNOU IN M	е релеплеен	ա յսա
	EIGHTH I				cial Circuit,	consisting of	Kent count	y alone,
	Bliss, Ta	arsney, 1 D.	3rec	kenridge, P.	neid the sai	me day as t	ne general	election,
Gratiot		2,916		F. 880	W Ransom I	11 781 Ma	iority for Gr	1961 1961
Isabella	2,180	1,838		160	The Gener	me day as t Grove, R., 13 D., 11,781. Ma al Banking L to the elector	w. submitte	d by the
Midland	1.802	1.185		112	Legislature t	o the elector	of Michiga	n at the
Montcalm	4.521	8,507		342	same election	n, received	48,531 "yes"	votes,
Saginaw	7.295	8,507 8,831		242	20,300 "no;"	on, received majority for dment to the	the law, 28,	231.
Shiawassee.	4,061	8,166		474	The Amen	ament to the	State Cons	titution,
M-4-1-		00.049		4 600	relative to ci	rcuit courts, l votes "yes.	also submit	ted, re-
Totals Plurality	23,028	20,948		1,709	was carried	i votes "yes. by a majority	of 1880 vote	o;"and
· many	, w, <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>				Courted	o, windjoilby	OT 1009 AOM	

#### State Election April 2, 1889.

	JUST	ICBS.		REGI	ENTS.			JUST	ICES.		REGI	ENTS.	_
ŀ					<u></u>			-	ä			Ď.	1
COUNTIES.	Grant, R.	Sherwood, D.	Draper, R.	Cocker, R.	Lawrence, D	Churchill, D.	COUNTIES.	Grant, R.	Sherwood, L	Draper, R.	Cocker, R.	Lawrence, I	Churchill, D.
Alcona	424	209	394	290	209	874	Lapeer	2620	1856	2618	2618	1857	1857
Alger	179	27	158	158	24	24	Leelanaw	516	844	516	517	344	344
Allegan	3288	2231	8312	8312	2172	2172	Lena ee	4442	3495	4449	4656	3452	3318
Alpena	1220	1161	1093	469	1148	1841	Livingston	2158	2144	2147	2149	2151	2149
Antrim	907	449	903	905	452	450	Luce	161	87	154	154	93	98
Arenac	127	22	108	108			Mackinac	820	573	309	310	583	584
Baraga	231	302	223	223	810	810	Macomb	1789	2460	1781	1788	2470	2470
Barry	2288	1833	2289	2290	1827	1826	Manistee	990	1208	997	950	1199	1200
Bay	2750	2598	2752	2683	2598	2365	Manitou		128	25.7		123	
Benzie	514	276	512	518	261	261	Marquette	8722	689	8523	.8523	724	783
Berrien	3276	3413	3283	3283	8404	3404	Mason	913	1023	957	956	998	999
Branch	2628	1316	2633	2633	1808	1809	Mecosta	1773	997	1784	1780	991	992
Calhoun	8669	2677	3692	3691	2661	2668	Menominee	2612	498	2250	2251	855	855
Cass	2006	1711	2011	2011	1706	1706	Midland	865	661	866	866	657	657
Charlevoix .	863	569	876	875	566	56	Vissaukee	833	252	345	341	244	242
Cheboygan	680	795	693	692	798	797	Monroe	2354	2012	2078	2070	2323	2324
Chippewa	1107	552	1091	925	556	844	Montcalm	2782	1789	2786	2786	1786	1786
Clare	515	276	547	517	265	274	M'tmorency	148	119	151	127	111	186
Clinton	2349	1782	2350	2351	1729	1780	Muskegon .	2414	1935	2420	2420	1921	1919
Crawford	255	236	255	255	236	236	Newaygo	1456	1141	1464	1471	1133	1124
Delta	1205	807	1104	1108	892	397	Oakland	8021	8974	3919	3920	3969	3978
Eaton	3194	1971	3191	8190	1912	1912	Oceana	1041	841	1039	1039	838	838
Emmet	768	767	766	769	766	769	()gemaw	479	366	471	471	878	373
Genesee	3825	2325	3833	8834	2316	2315	Ontonagon .	521	79	340	340	247	248
Gladwin	317	200	317	818	201	200	Osceola	1178	520	1177	1176	520	520
Gogebic	608	27	607	607	25	25	Oscoda	149	91	148	148	92	9.
Gd.Traverse	1397	587	1386	1386	599	598	Otsego	888	181	398	388	182	182
Gratiot	2619	1768	2623	2622	1762	1762	Ottawa	2682	1905	2680	2684	1904	1904
Hillsdale	3265	1522	8264	3265	1465	1464	Presque Isle	306	316	298	307	316	324
Houghton	2179	1095	2122	2124	1150	1149	Roscommon	165	135	133	133	167	167
Huron	1476	1568	1475	1476	1568	1567	Saginaw	4515	6123	4799	4561	5859	5827
Ingham	3653	8548	3648	3650	3546	3544	Sanilac	2158	1805	2152	2152	1797	1797
Ionia	2903	2628	2908	2908	2608	2608	Schoolcraft.	371	142	373	373	138	138
Iosco	994	935	994	995	937	935	Shiawassee	2567	1765	2568	2572	1756	1757
Iron	1500	8	1394	1394	109	109	St. Clair	3655	3292	3620	3650	3295	3295
Isabella	1367	971	1365	1363	976	972	St. Joseph	2426	2200	2435	2432	2194	2191
Jack-on	3927	3831	8899	3849	3857	8748	Tuscola	2878	1690	2893	2895	1674	1674
Kalamazoo .	3402	3088	8646	3647	2846	2846	Van Buren	3097	1769	3093	3091	1759	1759
Kalkaska	610	117	618	611	127	124	Washtenaw.	3114	3913	3071	3072	3936	3938
Kent	8452	7829	8388	8301	8015	7819	Wayne	9743	9971	9293		10348	
Keweenaw	860	49	320	320	90	90	Wexford	889	573	891	865	570	570
Lake	584	426	542	542	418	417	1		777		100	100	

Total for Claudins B. Grant, 156,456; for Thomas R. Sherwood, 122,925; majority, 33,531. For Chas. S. Draper, 154,977; John S. Lawrence, 123,855; majority, 3', 123. For Wm. J. Cocker, 153,773; W. L. Churchill, 123,793; majority, 29,980. The highest Prohib. vote was 16,524; Union Labor, 2675. Total vote, 298,481.

EDUCATIONAL.

Constitutional amendments; Increasing Governor's Salary—yes, 111,854; no. 72.494; majority, 39,360. Additional judge for Kent county—yes, 49,478; no, 18,934; majority, 29,-644. Duration of corporations—yes, 35,269; no, 28,950; majority, 6,319.

#### The State Institutions.

The University of Michigan.—This great institution, the pride of the State, was founded in 1837, but was not opened until 1841, and four years afterwards conferred its first degrees. Seven professors then constituted its faculty, only part of whom were resident and on active duty; it now has a corps of nearly one hundred teachers, and students numbering about 2025. A Department of Medicine and Surgery was organized in 1850, and one of Law in 1859. The Homeopathic Medical College, the College of Dental Surgery, and the School of Pharmacy, have since been added; and the Department of Literature, Science, and the Arts grants degrees on examination as Bachelor of Letters, Science (for courses in biology, chemistry, mining, mechanical and civil engineering, and general science), Phil-

osophy and Arts, Master of Arts, and Doctor of Philosophy; and Doctor of Laws, or Divinity, with others, as honorary degrees. Women as well as men are admitted to all schools and courses, and now form a large p reentage of the students. The libraries contain about 65,000 volumes and 25,000 unbound pamphlets. There are ample scientific cabinets, and a good art gallery and a museum, in which is included the entire Chinese exhibit made at the New Orleans Exposition. The University is situated in Ann Arbor, where it occupies a campus of forty acres, besides the site of the astronomical observatory. Any person, from any part of the world, may enter the institution. Students residing in the State pay \$10 matriculation fee, \$20 annual fee in the literary department, \$25 in the medical, dental, and pharmaceutical schools, and \$30 in the law

school; non-residents, \$25, \$30, \$35, and \$50, respectively. Diploma tee, \$10. J B Angell, President. Governed by Board of Regents.

THE AGRICULTURAL COLLEGE.—This is situa-ted upon a farm of 676 acres, three miles east ted upon a farm of 676 acres, three miles east of the Capitol in Lansing. It was founded by act of Legislature in 1855, and opened two years afterwards. Its purpose is defined as being "to afford thorough instruction in agriculture and the natural \*clences connected therewith." Its pecuniary foundation was originally provided by the State, at a first cust of \$55,520, to which a land-grant in value more than \$1,000,000 has since been added by the General Government. Its regular course extends through four years, but students in select courses are received for shorter periods. select courses are received for shorter periods. After a matriculation fee of \$3, there is no charge for tuition, but some manual labor is required. One of the experimental stations required. One of the experimental stations provided for by recent act of Congress, is located at the College. It has a faculty of sixteen, and about 350 students. Lemuel Clute, President. The State Board of Agriculture is its governing body.

THE NORMAL SCHOOL.—This is a training and

ractice-school, designed to prepare teachers for service in the common schools. It is at Ypsilanti, thirty miles west of Detroit; was established in 1851, and has a faculty of twenty-four with about 800 students, including the children in the practice department.

Any member of the Legislature may nominate two pupils for the school from his d strict, who receive free tuttion; others pay \$10 a year, and all are required to sign a declaration of their intention in good faith to engage in the business of teaching. Both sexes are admitted. The diploma of the school is evidence in all parts of the State of legal qualification to teach in the public schools. J. M. B. Sill, Principal. The State Board of Education Principal.

supervises the school.

THE REFORM SCHOOL.—This is also situated at Lansing, and is under the general supervision of the State Board of Corrections and Charities, and more particularly of a Board of Control. Originally opened in 1836 as a "House of Correction for Juvenile Offenders," its name was changed in 1839 to "the Reform School." which sufficiently indicates its intent and scope. Boys between the ages of tent and scope. Boys between the ages of ten and sixteen years, inclusive, are committed to the School on conviction of some offense, and may be detained until they reach ma-jority, though they are usually released upon satisfactory evidence of reformation. Making chair-seats is the principal industry taught, but tailoring and shoemaking, and other trades, are learned by some, and there is a farm of 224 acres which in part the inmates work. C. A. Gower, Superintendent. The Industrial Home for Grals.—This cor-

THE INDUSTRIAL HOME FOR GIRLS.—This cor-responds in the main to the Reform School, is located at Adrian, and was opened in 1881. Disorderly or wayward girls of seven to seven-teen years are sent to it by magistrates or county agents, and may be retained there until they are twenty-one. Margaret Scott, Superintendent. All its officers immediately

of the Board of Control.

THE PUBLIC SCHOOL—The State Public The Public School —The State Public School for Dependent and Neglected Children was located at Coldwater in 1874. It is not was located at Coldwater in 1874. It is not professedly an asylum or a reformatory, but a charity school, whose pupils (of both sexes) come principally from the county poorhouses, and it is made the duty of all officers administering the poor-laws of the State to send indigent children to it. If of sound health and free from contagious disease, they are received between the age of three and are received between the ages of three and twelve, cared for in cottages containing "fam-llies" of about thirty each, schooled for about

five hours a day, and in due time bound out under contracts requiring that these wards of the State shall be treated as in the family and receive at least three months' schooling per year. C. F. Newkirk, Superintendent and State Agent, under a Board of Control.

THE SOROL FOR THE BLIND.—This is the last of the State educational institutions situated at or near Lansing, to which it was removed from the Deat, Dumb, and Blind Asylum at Flint about seven years ago, it commiss the nonzerty formerly known as the occupies the property formerly known as the Odd Fellows' Institute, now owned by the State, which has made extensive additions to the buildings. Inmates are taught common and some advanced branches in five grades, and several manual industries are also practiced. J. F. McElroy, Superintendent. Governed by Commissioners.

DEAF AND DUMB ASYLUM.—The institution for educating the Deaf and Dumb was fourded at Flint in 1854, and until recent years ined at fiint in 1834, and until recent years in-cluded a department for the blind. It occu-pies grounds of 88 acres, and has a total property of about \$50,000. Ordinary school studies are pursued, and industries suitable to the sexes are taught. Michigan pupils are received without charge, and if indigent re-ceive \$40 a year for clothing and other ex-penses. Local Superintendents of the Poor are required to send there all deaf-mutes of render are within their jurisdiction. Marshall tender age within their jurisdiction. Marshall C. Gass, Superintendent. Governed by a Board of Trustees. THE MINING SCHOOL.—The Michigan Mining

School, founded by act of Legislature May 1, 1883, is situated at Houghton, with free tuition. Instruction is mainly by laboratory and field work and underground practice. M. E. Wadsworth, Principal; five instructors. Governed by Board of Control.

OTHER CHARITIES.

MICHIGAN ASYLUM FOR THE INSANE.—At Kalamazoo; established by the Legislature in Kalamazoo; established by the Legislature in 1848, but not opened till 1859. It is now a great institution, with at times nearly 1000 inmates. Dr. Geo. C. Palmer, Medical Superintendent. Governed by Trustees.

EASTERN ASTLIM FOR THE INSANE.—Completed and occupied at Pontiac in 1878, and has now a capacity of receiving 6.0 patients. Medical Superintendent, Dr. C. B. Burr. Also in charge of Trustees.

Noorhead Superintendent, Dr. C. B. Burr. Also

NORTHERN ASYLUM FOR THE INSANE.—Formally opened at Traverse City Nov. 30, 1885.
Medical Superintendent, Dr. Jas. D. Munson.
ASYLUM FOR INSANE CRIMINALS.—Established in 1883 at the Ionia House of Correction.

and governed by the same managers. Medical Superintendent, Dr. O. R. Long.

The Soldiers' Home —Founded near Grand

THE SOLDIERS' HOME—Founded near Grand Rapids, upon a tract of 132 acres, and dedicated Dec. 30, 1886. Any indigent and honorably discharged soldier or sailor of the late civil war is eligible to its benefits. Its immetes number about 415. Manager, Col. Samuel Wells. Supervised by a Board of Managers.

PENAL.
THE STATE PRISON.—This was planted a Jackson fifty-one years ago (1839), and during some years has been self-supporting. It es provide for about 750 convicts. Warden Hiram F. Hatch; in charge of Inspectors

DETROIT HOUSE OF CORRECTION .- This is local institution, but is also used for the reception of criminals from other parts of the state. Joseph Nicholson, Superintendent, Ionia House of Correction.—The State.

House of Correction and Reformatory, log at Ionia in 1877, and has about 750 inma Warden, Edwin C. Watkins.

A House of Correction and Branch & Prison for the Upper Peninsula was loc

at Marquette in 1885.

Soldiers' Societies in Michigan, and next Reunions.

[See page 64, for Michigan officers of National Societies. The next State Encampment of the G. A. R. will occur at Adrian, April 1-3, 1890.]

Grand Army Association of Southeastern Michigan: Geo. D. Harding, Sec'y, Jonesville.

Geo. D. Harding, Sec'y, Jonesville.

Soldiers' and Sailors' Association of Southeastern Washington, D. C.: C. N. Hunt, Sec'y, Jackson, Det. 2.

First Engineers and Mechanics: W. P. Innes, Grand Rapids: Flay Wyckoff, Sec'y, Teatron Wichlester, Grand Rapids: Flay Wyckoff, Sec'y, Teatron Wyckoff, Sec'

somers and sanors association of south-western Michigan: Geo, M. Buck, President, Kalamazoo; A. A. Blakeman, S. c'y, Otseko, Northern Michigan Association: James Greacen, Commander, Kalkaska; C. J. Cau-non, S. V. Comd'r, Evart. Michigan Society of New York Soldiers and

Michigan Society of New York Soldiers and Sailors: N. G. Coop r, Pres., Sturgis; A. A. Wilbur, See'y, Sturgis. Custer Cavalry Brigade: R. A. Alger, Pres., Detroit; A. E. Mathews, See'y, Milford. Artillery Association of Mich.: H. V. D. Baker, Pres., Hills ale; C. J. Burnett, See'y,

Baker, Flow,
Lausing. Next reunion as
day of State Fair, 1890.
Sixth Mich Heavy Artillery: Harry Soule,
Frea, Ann Arbor; Dr. Milton Chase, Sec'y,
Otsego. Aug. 20, at Albion.
Battery D: Sam'l Kilbourn, Pres.; D. E.
Union City. Union City, Sep-

Battery H: M. D. Elliott, Pres., Holly; C. A. Frieslander, Sec'y, Bay City. Reunion with Artillery Association. Reunion

with Artillery Association.

Batterv M: A. McMillen, Pres., Bay City;
Geo. W. Burgess, S-c'y, Highland. In Detroit
during next Exposition.

Third Mich. Cavalry. Kalamazoo, Jan. 27.
Fourth Cavalry: L. H. Wilcox, Pres.,
Corunna; H. A. Backus, S-c'y, Detroit.
Lansing, probably State Fair week.
Seventh Cavalry: Jas. L. Carpenter, Pres.,
Blissfield; J. Q. A. Sessions, Sec'y, Ann Arbor.

Rattle (Treek upon call

Battle Creek, upon call.
Eighth Cavalry: E. Mix, Pres., Eighth Cavalry: E. Mix, Pres., Allegan; J. W. Hallock, Sec'y, Sparta. Next reunion Northeastern Ass'n.

Eleventh Cavalry: W. B. Thompson, Pres,

First Engineers and mechanics with the press, frank Rapids; Flay Wyckoff, Sec'y, E. Saginaw. Grand Rapids, Oct. 9.
First Sharpshooters: Frank Whipple, Press,

Port liuron; H. D. Blakeman, Sec'y, Jackson. Eighth Infantry John F. Jackson Pres., Jackson; Thes. Moloney Sec'y, Jackson.

Ja kson; Thos. Jackson, Jun- 18.

Jackson, June 18. Eleventh Infantry; W S. Whitney, Pres., Allen; Jas. A. Todd, sec'y, Burr Oak. Allen, Aug. 20. Twelfth Infantry: Ora Nutting, Pres., Beuton Harbor; Wm. Horton, Sec'y, Hartford.

Dowagiac, Oct. Sixteenth Infantry: H. H. Aplin, Pres., W.

Sixteenth littentry: H. H. Apini, Free, w. Bay City, A. G. Cameron, Sec'y, Lansing. Seventeenth ("Stonewall") Infantry: Thos. Mathews, Pres., Oswego, N. Y.; Austin George, Sec'y, Ypsilanti, Ypsilanti, Sept. 14. Nineteenth Intantry: D. J. Easton, Pres., Thomas Gody Battle Creek

Union City; M. B. Duffie, Sec'y, Battle Creek, Union City Sept. 10. Twentieth Infantry: Rev. C. D. Berry, Pres., Tekonsha; Geo. S. Smith, Sec'y, Marshall.

Tekonsha; Geo. S. Smith, Sec'y, Marshall. Marshall, upon call.

Twenty-third lifantry: Fred. A. Ashley, Pres., Saginaw; C. E. McAlester, Sec'y, Flint. Twenty-seventh Infantry: O-car Hancock, Pres., Hillsdale; John Van Horn, Sec'y, Portland. Lansing, Wednesday, State Fair week. Twenty-eighth Infantry: Thos. B Blosser, Pres. Lansing: Thos. Courtney, Sec'y, Jackson. Kalamazoo. Oct. 29.

Son. Asiamazzo, Cet. 20.
Company B, 44th Illinois Infantry: B. Q.
Goodrich, Pres., wasepi; B. F. Ralph, Sec'y,
Tekonsha, Coldwater, Oct. 15.
[Additional information of such societies,

and of reunions beyond 1890, will be welcomed by the DETROIT JOURNAL.]

Some Laws Passed by the Legislature of 1889.

Liquor law, taxing annually the manufacture of spirituous liq fors to sell at wholesale, sure of spirituous iiq iors to s ii at wholesale, \$1000; making ferm uted drinks for wholesale, \$65; wholesale selling of either, \$500; retail selling of both, \$500; welling both at wholesale and retail. \$1000. It is believed this law will be invalidated by the Supreme Court.

Election law, applying to all cities and other municipalities in the following particulars: Party tickets, with vignette or healing not more than 2 by 44 inches, are to be filed by managing committees with the County Clerk at least ten days before election, under penalty of \$1000 or less, or year's imprisonment, either or both. Printing or circulating any other ticket, or part of ticket, under a given heading is also a penal offense (but any one may change his own ticket as he likes, in writing or by a printed slip). A railing or fence four feet high shall be placed through and across the center of the room where the election is to be held. The entrance rate, in charge of a keep r, is to be placed at one side of the room, and on the inside of it a booth or temporary room erected. There shall be one booth for each 100 voters, and one additional booth for each additional number less than 100 and more than 25, the walls of such booths to be at least six feet high and so arranged that at the elector passes into the room where the ballots are taken by the Inspectors, he all pass through the booth and be concealed ions the view of the Inspectors and those sthout the railing. Inspectors are required beep in these booths tickets of all political parties; and slips of all candidates. All tickets re to be printed at the State printing-office.

Voters must attend personally now, in order to be registered.

Fish and game law, forbidding the taking of speckled or California trout, land-locked salmon, or grayling, from Sept. 1 to May 1; muskallonge, black, strawberry, green, or white bass, March 1 to July 1; spearing fish white bass, March 1 to July 1; snearing fish (except mullet, grass pike, red-sides and suckers) March to June inclusive, except in the great lakes, or to catch with nets at any time except in the great lakes with their connecting rivers, and in Saginaw river; taking fish at any time in any other way than by hook and line in the St. Clair river or channels below Algonac or above a line from the south end of the ship canal to the mouth of the Clinton expent that mullet wall edge. the Clinton, except that mullet, red-sides, and suckers may be taken with d p-nets; or to take except by hook or line, or in Lakes Superior, Michigan, Huron, and Erie, and their bays and harbors, any speckled or brook, German, or California trout, black, strawberry, green, or white hass, land-locked solmon, or grayling; or to take brook or California trout or grayling from any stream in which they are not native, in less than three years after planting therein by the State Fish Commissioners, or to take or have from any waters these or the land-locked salmon or grayling less than six inches long, or to take brook trout or graying for purposes of sale, or to take minnows or other small-fry fish for anything but bait. Kill deer only Nov. 1 to Dec. 1 inclusive, except in the U. P. Sept. 25-Nov. 15. Lights, dogs, and traps prohibited in deer-killing, and killing in water. Wild turkeys, only Oct, and Nov.

MONOGEDEE HE AD TELECTOR TECKOON DE LECHTRORES ECTE DE TECHT

Goskariski Sagitaer E. Tavara  Oroni Stanti Mightaer E. Alpena  Oroni Stanti Midhaed  Midhaed	Maret 4.  Olipashing Rollpashing Olipashing
SAILING DISTANCES.	
	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
This table of distances between vari-	20055
ous lake ports, was compiled by the	IIIIIIIII BREEFERS
Detroit Dry Dock Co., Ship Builders	HARBERS SEE
and Repairers, Detroit, Mich., who	JIIIII I WORNESHEE
have assured the Detroit Journal of	THE STREET STREET
its accuracy. The measurements	BEETHERE RESERVE
follow the established water	TITLE SARBERT BERRET
routes. Those from points on	TERRETERINE STEEL
Lake Erie to Lake Ontario	
are via the Welland Canal.	TEGGERAL GEORGE CONTRACTOR OF THE CONTRACTOR OF
/::::::::::::::::::::::::::::::::::::::	F 7 8 8 7 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
†Through Portage Canal.	22222222222222
* Through Sturgeon Bay Canal.	
Introducting con bay Canal	THE RECEER HERE BELLEVE
	* * * * * * * * * * * * * * * * * * *
	+ R × R R R + 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	20 20 20 20 20 20 20 20 20 20 20 20 20 2
	888888888888888888888888888888888888888
9 2 10 10 10 10 10 10 10 10 10 10 10 10 10	
9 5 11 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	THE RESERVE TO THE PROPERTY OF THE PARKETY
	100000000000000000000000000000000000000
100 Sept. 100 Se	* 68 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	######################################
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SONO BON OF BUNDAN SONO BONO BONO BONO BONO BONO BONO BON
776	2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2000 Challes (2000 Challes (20	
arich.  1 Baal  2 Baal	A Visco
the state of the s	Control of the Contro

The most remarkable public work in Michigan is the great Ship Canal at Sault Ste. Marie, in the St. Mary's River, or strait connecting Lakes Superior and Huron. Ground was broken for it by the State June 4. 1855; it was con-idered completed May 21, 1855, and the first vessel, the steamer Illinois, was locked through June 18 of the same year. Each of the two locks was thei 850 feet long, 70 feet wide, and 24% feet deep. July 25, Or feet wide, and 24% feet deep. July 25.

1875, the construction of a third lock—the largest of the kind in the world—515, 80, and 55 feet in principal dimensions—was begrun, 35 the first vessel locked through it Sept. 1, 180 June 6 of that year, the canal was transfer to the Federal Government, and made free tolls. It is 7000 feet long. Another grelock now building on the site of the two is ones, will be 800, 100, and 4345 feet in dimesions, with a cubic capacity of 3,440,000 feet.

### The Post-Offices of Michigan.

Money-order offices marked \*; international money-order offices † (these also issue orders in Canada, Great Britain, Germany, France, Switzerland, Netherlands, Italy, Belgium, Sween, Norway, Denmark, Portugal (including the Azores and the Madeira Islands), Algeria, ape Colony, British India, Japan, Tasmaula, Queensland, Victoria, New South Wales, the landwich, Windward, and Leeward Islands, Jamaica, etc.). Those marked ‡ issue postalotes, but not money-orders, and do not pay either. County-seats in small capitals.

bbott, Mason. bronia, Allegan.
beccta, Calhoun.
me, Grand Traverse.
A. Kent.

Atkins, St. Clair. air, St. Clair. iamsville, Cass. ddison, Lenawee. brian, Lenawee.t dvance, Charlevoix. tna, Newaygo. gnew, Ottawa. gricultural College,

ngham. Ainger, Eaton. Akron, Tuscola. Alabaster, losco Alamando, Midland. Alamo, Kalamazoo. Alanson, Emmet. Alaska, Kent. lba, Antrim. Ibien, Cathoun.\* Icona, Alcona, Membic, Isabella Algansee, Branch. liger, Arenac. Algodon, Ionia Algonac, St. Clair.\* Algonac, St. Clair.\*
Allegan.† Allegan.†
Allen, Hillsdale.\*
Allen Creek, Oceana.
Allendale, Ottawa.
Alleyton, Newaygo.\*
Allis, Presque Isle.
Allouez, Koweenaw.
Allouez, Koweenaw.
Allouez, Koweenaw. lma, Gratiot.\* lmena, Van Buren. lmira, Benzie. lmont, Lapeer.\* LPENA, Alpena.† lpine, Kent. lto, Kent. lton, Kent. ltona, Mecosta, lverson, Ingham. madore, Sanilac. mber, Mason. mble, Montcalm. mboy, Hillsdale. mboy, Hillsdale, mmon, Wayne. msden, Montcalm. my, Oakland. schorville, St. Clair. sderson, Livingston. mArson, Washt'n'wipenzeil, Crawford. plegate, Sanilac. pleton, Emmet. al Renzie

Benzie. bela, Tuscola. cadia, Manistee.

chie, G'd Traverse.

entine, Genesee.;

r, Saginaw. Baraga. d, Newaygo.

Macomb.\*

Center, Ne-

enac, Arenac. endal, Manistee.

yle, Sanilac. Inle, Lapeer. Ind, Jackson.

cadia.

rwood, Kalkaska Co. Ashley, Gratiot. Ashton, Osceola. Atlanta, Montmorency. Atlantic Mine, Houghton.‡

Atlas, Genesee. Attica, Lapeer. Atwood, Antrim. Auburn, Bay. Au Gres, Arenac. Augusta, Kalamazoo.\* Aurelius, Ingham. Au Sable, Iosco.\* Austerlitz, Kent. Austin, Oakland. Au Train, Alger. Averill, Midland. Avery, Berrien. Avondale, Osceola. Ayr, Emmet. Azalia, Monroe. Azana, momoe.
Bachelor, Mason.
Bad Axe. Huron.\*
Bagley, Menominee.
Bailey, Muskegon.
Bainbridge, Berrien. Ballowin, Lake. Ball, Cheboygan. Bancroft, Shiawassee.\* Bandola, Wexford. Bandola, Wexford. Banfield, Barry. Bangor, Van Buren.\* Banker's, Hillsdale. Banks, Bay. Bannister, Gratiot, Baraga, Baraga.

kaska.‡
Barkville, Delta.\*
Barron Lake, Cass.
Bartlett, G'd Traverse. Bass River, Ottawa. Batavia, Branch. Batta, Clinton.\* Bolton, Alpena.
Battle Creek, Calhoun. Borculo, Ottawa.
Bauer, Ottawa.
Bostwick, Kent.
Bay Citt, Bay.†
Bowen's Mills, Barry. BAY CITY, Bay.†
Bay de Noquette, Delta.
Bay Mills, Chippewa.\*
Bay Port, Huron.
Bay Springs, Charle-

Barbeau, Chippewa Barker Creek, K

Kal-

ren.\*

voix Bay View, Emmet. Beacon, Marquette. Bear Lake, Manistee.\* Beaser, Ontonagon. Beaver Dam, Ottawa. Beaver Lake, Ogemaw. Bedell, Bay. Bedford, Calhoun.\* Bedford Station, Calhoun.

Beebe, Gratiot. Beech, Wayne. Belden, Wayne. Belding, Ionia. Bell, Pre-que Isle. BELLAIRE, Antrim.\* Bell Branch, Wayne. Belle River, St. Clair. Belleville, Wayne.\* Bellevue, Eaton.\* Belmont, Kent. Bennett, Lake. Bennington, Shiawas-Se0. Benona, Oceana. Benson, Wexford. Bentley, Bay. Benton Harbor, Ber-

Benzonia, Benzie.\* Berlamont, Van Buren. Berlin, Ottawa.\* Berne, Huron.

Berryville, Otsego. Bertrand, Berrien. Berville, St. Clair. Bessemer, Gogebic.† Bethel, Branch.
Betzer, Hillsdale.
Big Beaver, Oakland.
Big Prairie, Newaygo.
Big Rapins, Mecosta.†
Big Rock, Montmorency. Big Spring, Ottawa. Bingham, Leelanaw.

Birch Run, Saginaw.1

Bird, Oceana Birkett, Washtenaw. Birmingham, Oakla'd.\* Bismarck, Eaton Black Lake, Muskegon. Black Muskegon. Black River, Alcona.\* Blaine, St. Clair. Blanchard, Isabella. Blendon, Ottawa. Bliss, Emmet. Blissfield, Lenawee.\* Bloomingdale, Van Bu-

Bluffton, Muskegon.\* Blumfield, Seginaw. Bois Blanc, Mackinac. Bowne, Kent.
Boyne, Charlevoix.
Boyne Falls, Charlevoix.

Bradford, Midland. Bradley, Allegan. Brampton, Delta. Branch, Mason. Brant, Saginaw. Bravo, Allegan. Breckinridge, Gratiot.\* Breedsville, V'nBuren.\* Brice, Gratiot. Bridgehamton, Sanilac. Bridgeport, Saginaw. Bridgeton, Newaygo. Bridgeville, Gratiot. Bridgewater, Washte-

naw. Bridgman, Berrien.
Brighton, Livingston.\*
Brinton, Isabella.
Bristol, Lake.
Britton, Lenawee. Brockway, St. Clair. Brockway Centre, St. Clair.\* Bronson, Branch.\*
Brookfield, Eaton.

Brooklyn, Jackson.\* Brooks, Newayko. Brouard, Barry. Brown City, Sanilac. Brownsville, Cass. Bruce's Crossing, Ontonagon. Brut s, Emmet. Buchanan, Berrien.\* Berrien Center, Berrien. Buckhorn, Cheboygs.
Berrien Springs, Ber-Buck, Sanijac.
rien.\*
Berryville, Otsego.
Bunker Hill, Ingham. Burdickville, Leelanaw

Burgess, Charlevoix. Burlington, Calhoun.\* Burnham, Manistee. Burnips' Corners, Allegan.\* Burnside, Lapeer. Burr Oak, St. Joseph.\* Burt Lake, Cheboygan. Burton, Shiawassee. Butler, Branch. Butman, Gladwin Butternut, Montcalm. Buttersville, Mason. Byers, Mecosta. Byron, Shiawassee.\* Byron Centre, Kent.\* Cadillac, Wexford.† Cadmus, Lenawee. Cady, Macomb. Caldwell, Isabella Caledonia Sta., Kent. California, Branch. Calkinsville, Isabella Calumet, Houghton.+ Calvin, Cass. Cambria, Hillsdale.\* Cambridge, Lenawee. Camden, Hillsdale. Campbell, Ionia. Campbell's Corners,

Corners. Ogemaw. Canada Corners, Muskegon Canandaigua, Lenawee Canboro, Huron. Canby, Emmet. Cannonsburgh, Kent. Canton, Wayne, Capac, St. Clair. Carbondale, Menomi nee.

Carland, Shiawassee. Carleton, Monroe. Carlisle, Eaton. Carlton Centre, Barry. Carney, Menominee. Caro, Tuscola. Carpenter, Emmet. Carp Lake, Emmet. Carrollton, Saginaw. Carson City, calm.\* Mont-

Carsonville, Sanilac.\* Cascade, Kent. Casco, St. Clair. Caseville, Huron. Cash, Sanilac.

Casnovia, Kent.\* Cass Bridge, Saginaw. Cass City, Tuscola.\* CASSOPOLIS, CASS. Cato, Montcalm. Cedar Creek, Barry. Cedar Dale, Sanilac. Cedar Lake, Montcalm. Cedar Dale, Sanilac. Contmerce, Oakland. Cedar Lake, Montcalm. Comstock, Kalamazoo. Cedar River, Menom-Concord, Jackson.\* Cedar Run, G'd Traverse Cedar Springs, Kent.\* Cedarville, Mackinac. Central Lake, Antrim. Central Mine, Kewee-Centre Line, Macomb. CENTREVILLE, St. Joseph. Ceresco, Calhoun.\* Ceylon, Barry. Chadwick, Ionia. Champion. Marquette.† Chandler, Ionia. Chapel, Kent. Chapin, Saginaw. Charleston, Sanilac. Charlesworth, Eaton. Charle-Charlevoix, voix.t CHARLOTTE, Eaton.† Chase, Lake.\* Chassell, Houghton. Chauncey, Kent. Cheboygan, Cheboygan.t Chelsea, Washtenaw.\* Chesaning, Saginaw.\* Cheshire, Allegan. Chester, Eaton. Chesterfield, Macomb. Chestonia, Antrim. Calef. Manistee. Chilson, Livingston. Chippewa Lake, Mecosta. Chippewa Station, Osceola. Chubb's Corners, Livingston. Churchill, Ogemaw Church's Corners, Hillsdale Clam Lake, Antrim. Clare, Clare. Clarendon, Calhoun. Clarion, Charlevoix. Clark, Lake. Clarksburgh, Marquette. Clarkston, Oakland.\* Clarksville, Ionia. Clawson, Oakland. Clay Bank, Oceana. Clay Hill, Wexford. Clayton, Lenawee.\* Clear Water, Kalkaska. Cleon, Manistee. Clifford, Lapeer. Climax, Kalamazoo.\* Clinton, Lenawee.\* Clio, Génesee.\* Cloverdale, Barry. Clyde, Oakland.\* Coat's Grove. Barry. Cob Moo Sa, Oceana. Cohoctah, Livingston. Colby, Montcalm. COLDWATER, Branch.t Cole, Oakland. Coleman, Midland.\* Colfax, Wexford. / Collins, Ionia.

Coloma, Berrien Colon, St. Joseph. Columbia, Tuscola. Columbiaville, Lapeer. Columbus, St. Clair. Colwood, Tuscola. Cone, Monroe.
Conger, Manistee.
Conklin. Ottawa.
Conn. r's Creek, Wayne Derrort, Wayne.†
Conn. r's Creek, Wayne Deveraux, Jackson.
Devil's Lake, Lenawe Conway, Emmet. Cook's, Schoolcraft. Cooper, Kalamazoo. Coopersville, Otlawa.\* Copley, Lake. Copper Falls Mine, Ke-Copper Falls Mine, Kegan.
weenaw. Dickinson, Newaygo.
Copper Harbor, Kewee- Dighton, Osceola. naw. Coral, Montcalm.\* Corey, Cass. Corinth, Kent. Corning, Allegan. Cortland Centre, Kent. Corring, Allegan.
Cortland Centre, Kent.
Cortland Centre, Kent.
Coruny, Shiawassee.† Dot, Charlevoix.
County Line, Saginaw.
Covert, Van Buren.
Creftg, Houghton.
Cranston, Oceana.
Crapo, Mecosta.
Crawford's Quarry,
Presque Isle.
Donaldson, Chippewa.
Dot, Allegan.\*
Downing. Allegan.\*
Downington. Sanilac.
Doyle, St. Clair.
Drako, Lapeer.
Drayton Plains, Oakland. Presque Isle. Creel, Huron. Cressey, Barry, Creswell, Antrim. Crofton, Kalkaska. Crooked Lake, Clare. Crosby, Kent. Crossman, Tuscola. Cross Village, Emmet. Croswell, Sanilac.\* Croton, Newaygo.\* Crow Island, Saginaw. Crystal, Montcalm. Crystal Falls, Iron.\* Crystal Valley. Oceana. Cumber, Sanilac. Cushing, Cass. Custer, Mason. Cutcheon, Missaukee, Daggett, Menominee, Dailey, Cass. Dalton. Muskegon. Damon, Ogemaw. Danby, ionia. Dansville, Ingham.\* Dash, Muskegon. Davis, Macomb.; Davisburgh, Oakland. Davison Sta., Genesee. Day, Cass. Dayton, Berrien. Dayton, berrion.
Deanville, Lapeer.
Dearborn. Wayne.
Decatur, Van Buren.\*
Deciple, Mecosta.
Deckerville, Sanilac. Deep River, Alenac. Deer Creek, Livingston. Deerfield, Lenawee.\* Deer Lake, Lake. Deer Park, Luce. Deflance, Delta. Deford, Tuscola Delaware Mine, Kewee-Deihi Mills, Washten'w. East Thetford, Genesee.

Dellwood, Eaton De Loughary, Menomince. Delray, Wayne. Delta, Eaton. Delton, Barry Delwin, Isabella. Denmark, Tuscola.
Denmark, Tuscola.
Dennison, Ottawa.
Denton, Wayne.
Denver, Newaygo.
Detour, Chippewa. Devil's Lake, Lenawee. De Witt, Clinton.\* Dexter, Washtenaw. Diamond Lake, Nowaygo. Diamond Springs, Alle-Dimondale, Eaton. Disco, Macomb.
Dollar Bay, Houghton.
Dollarville, Luce.
Donaldson, Chippewa. land. Drenthe, Ottawa. Drummond, Chippewa. Dryden, Lapeer Duck Lake, Calhoun. Duffield, Genesee. Duncan, Cheboygan. Dundee, Monroe.\* Dunningville, Allegan. Du Plain, Clinton. Durand, Shiawassee.1 Dushville, Isabella, Dutton, Kent. Dwight, Charlevoix. Eagle, Clinton. Eagle Harbor, Keweenaw.
Eagle Mills, Marquette. Fairfield, Lenawea.
Eagle River, Kewee Fair Grove, Tuscolatnaw.
Fair Haven, St. Clair. Cames, Oakland. East Cohocton, Livingston. East Dayton, Tuscola. East Fremont, Sanilac. East Gilead, Branch. East Greenwood, St. Clair. East Holland, Ottawa. East Jordan, Charlevoix.\* Eastlake, Manistee. East Leroy, Calhoun. Fennville, Allegan. Eastmanville, Ottawa.; Fenton, Genesea.\* Easton, Shiawassee. East Paris, Kent. Eastport, Antrim East Saginaw, Saginaw.† Ferry, Oceana.‡ (Station S'thSaginaw.\*) Ferry, burgh, Ottaw East Saugatuck, Alle- Fife Lake, Grand Tr gan. East Springport, Jack-Filer City, Manistee son. Filion, Huron. East Tawas, Iosco.+

Eastwood, Saginaw. Easy, Tu-cola. Eaton Rapids, Eaton Eau Claire, Berrien. Echo, Antrim. Echford, Calhoun. Ecorse, Wayne. Eden, Ingham. Edenville, Midland. Edgerton, Kent. Edgewater, Benzie. Edgewood, Gratiot Edmore, Montcalm Edson Corners, Mi saukee Edwardsburgh, Cas Elba, Lapeer. Elbridge, Oceana. Elgin, Ottawa. Elk, Genesee. Elk Rapids, Antrim Elkton, Huron Ellington, Tuscela Ellis, Calhoun. Ellsworth. Antrim. Elm, Wayne. Elmer, Sanilac. Elm Hall, Gratiot.\* Elmira, Otsego. Elmwood, Tuscola. Elsie, Clinton.\* Elva, Tuscola. Elwell, Gratiot. Ely, Emmet Emerson, Chippewa. Emery, Washtenaw. Emmet, St. Clair. Empire, Leelanaw. English, Menominee. Englishville, Keut. Ensley, Newaygo. Entrican, Montcaim. Epoulette, Mackinac. Epsilon, Emmet. Erie, Monroe Escanaba, Delta.† Esmond, losco, Essexville, Bay. Euroka, Clinton. Evans, Kent. Evart, Osceola.† Excelsior, Kalkaska. Exeter, Monroe Factoryville, seph. Fairland, Berrien Fairview, Oscoda. Falcon. Sanilac. Fallassburgh, Kent. Falmouth, Missaukes, Fargo, St. Clair. Farmers' Creek, Le peer. Farmington, Oakland Farwell, Clare. Fawn River, St. Joseph Fayette, Delta \* Fenwick, Montcalm. Fergus, Saginaw. Fern, Mason. Ferris, Montcalm. erse.\* Fillmore Centre, 🕰

Finkton, Antrim.
Fisher, Presque Isle.
Fisher's Station, Kent.
Glen Haven, Leelan
Glen Lord, Berrien. Fishville, Montcalm. Fitchburgh, Ingham. Five Lakes, Lapeer. Flanders, Alpena. Flat Rock, Wayne. Fletcher, Kalkacka Fletcher, Kalkaska. FLINT, Genesee.† Flint River Junction, Genesee. Floodwood, Marquette. Florence, St. Joseph. Flower Creek, Oceana. Flowerfield, St. Joseph. Flushing, Genesee.4 Ford River, Delta. Forester, Sanilac. Forest Grove, Ottawa. Forest Hill, Gratiot. Forestylle, Sanilac.\* Fork, Mecosta. Forman, Lake. Forsyth, Marquette. Fort Gratiot, St. Clair.\* Foster City, Menom-

Fostoria, Tuscola. Fountain, Mason. Four Towns, Oakland. Fowler, Clinton. Fowlerville, Livingston. Francisco, Jackson.

Frankenmuth, Sag-

inaw.‡ Frankfort, Benzie.\* Franklin, Oakland.‡ Fraser, Macomb. Frederic, Crawford, Fredonia, Washtenaw. Freeland, Saginaw. Freeport, Barry.\* Freibruger's, Sanilac. Free Soil, Mason. Fremont, Newaygo.\* Frontier, Hillsdale.\* Frost, Saginaw. Fruit Print Ridge, Lenawee. Fulton, Kalamazoo. Gagetown, Tuscola.\* Gaines Station, Gene-see.\*

Galesburgh, Kalama-200.\*

Galien, Berrien.\* Galt, Missaukee. Ganges, Allegan.\*
Garden, Delta.\*
Gateville, Chippewa.
GAYLORD, Otsego.
Geary, Clinton.
Generae Village Geary, Clinton. Hanley, Ottawa. Genesee Village, Gene- Hannah, Grand Trav-

Geneva, Lenawee.‡ Georgetown, Ottawa. Gerkey, Barry. Germania, Sanilac. Gibraltar, Wayne. Gibson, Allegan. Gloson, Allegan.
Gliddings, Baraga.
Glilbert, Wexford.
Glichrist, Mackinac.
Glilead. Branch.
Glifford, Tuscola.
Gliwad Branch.
Elizad Branch. Girard, Branch.\* Gitchel, Ottawa. Gladatone, Delta.\*

Glendale, Van Buren. Glen Haven, Leelanaw. Hatton, Clare Glenn, Allegan. Glenwood, Cass. Gobleville, Van Buren.\* Godfrey, Alpena. Gogebic Station, Goge-

Goodell's, St. Clair. Good Harbor, Leelanaw

Good Hart, Emmet. Goodison, Oakland. Goodland, Lapeer. Goodrich, Genevee. Gould City, Mackinac. Gowen, Montcalm.\* Graafschap, Allegan. Grafton, Monroe. Grand Blanc, Genesce.\* GRAND HAVEN, Otta-

WA. T Grand Junction, Van Buren.\*

Grand Ledge, Eaton.\* Grand Marais, Alger, GRAND RAPIDS, Kent.† Grand View, Oceana. Grandville, Kent. Grant, Kent. Grape, Monroe. Grass Lake, Jackson.\* Grattan, Kent.\* GRAYLING, Crawford. Greenbush, Alcona. Green Creek, Muskegon Greenfield, Wayne. Greenland, Ontonagon. Greenleaf, ranilac Green Oak, Livingston. Greenville, Montcalm.† Greenwood, Ogemaw. Gregory, Livingston. Gresham, Eaton. Grindstone City, Huron Griswold, Kent.
Grosse Isle, Wayne.
Grosse Point, Wayne.
Grove, Newaygo.
Groveland, Oakland.
Groveton, Houghton. Gull Lake, Barry. Gun Marsh, Allegan. Hadley, Lapeer. Hagar, Berrien.

Hagensville, Presque Haire, Wexford. Hamblen, Bay. Hamburgh, Livingston. Hamilton, Allegan. Hancock, Hour hton.\* Hand Station, Wayne.

Hanover, Jackson.\* Harbor Springs, Emmet.

Haring, Wexford. HARRISON, Clare. HARRISVILLE, Alcona.+ HART, Oceana † Ingalls, Menomine Hartford, VanBuren. † Ingersoll, Clinton. Hartland, Livingston. † Inkster, Wayne. Hartsuff, St. Clair. Inland, Benzie. Hartwellville, Shiawas-Intermediate, Charle-

Hartwick, Osceola. Harvard, Kent. Harvey, Marquette. HASTINGS. Barry.+ Gisa Harbor, Leelanaw Hasty, Gratiot.

Hatmaker, Branch. Hawkhead, Allegan. Hayes, Huron. Hazelton, Shiawassee. Helena, Huron. Hemlock City, Saginaw.‡ Henderson, Shiawas

see. Henrietta, Jackson. Hermansville, Menom-

Herrington, Ottawa. HERSEY, Osceola, + Hesperia, Oceana.\* Hessel, Mackinac. Hetherton, Otrego. Hickory Corners, Barry Highland, Oakland.

Hobart, Wexford.\* Hodunk, Branch. Holbrook, Sanilac. Holland, Ottawa.\* Holloway, Leelanaw. Holly, Oakland.\* Holstein, Oceana. Holt, Ingham. Holton, Muskegon. Homer, Calhoun.\* Homestead, Benzie. Hope, Midland, Hopkins, Allegan. Hopkins Station, Allegan.\* Horton, Jackson. Horton's Bay, Charle-Houghton Lake, Ros-

common. Houseman, Oceana. HOWARD CITY, Montcalm.t Howardsville, St. Joseph.

HOWELL, Livingston. Hoytville, Eaton.\* Hubbard Lake, Alpena. Hubbardston, Ionia.\* Huron, Huron. Huronia Beach, St.

Ida, Monroe.\* Ida, Monroe.

Imlay, Lapeer.

Imlay City, Lapeer.\*

Index, Lapeer.

Indian Lake, Oscoda.

Indian River, Cheboygan.

Clair.

Ingalls, Menominee. voix.

Inwood, Charlevoix. Ionia, Ionia.† Iosco, Livingston. Iron Mountain, Menominee.\*

IRON RIVER, Iron.\* Ironton, Charlevoix. Ironwood, (logebic.\* Iroquois, Chippewa. Irving, Barry. Isabella, Delta ISHPEMING, Marquette.+ ITHACA, Gratiot.† Ivan, Kalkaska. Jacobsville, Houghton. Jack Pine, Crawford. Jackson, Jackson.† Jamestown, Ottawa. Jamper, Lenawee. Jeddo, St. Clair. Jefferson, Hillsdale. Jenisonville, Ottawa. Jenney, Tuscola. Hickory Corners, Barry Jennings, Missaukee, Highland, Oakland. Jerome, Hillsdale, Highland Station, Oak- Jessieville, Gogebic. Jonnson, Jackson.
Jones, ('ass.\*
Jonesville, Hillsdale.\*
Joy, Charlevoix.
Hills Corners, Berrien.
Hillsdale, Hillsdale.†
Joyfield, Benzie.
Hinchman, Berrien.
Hobart, Wexford \*

Jonnson, Jackson.
Jonesville, Hillsdale.\*
Joys Charlevoix.
Joyfield, Benzie.
Wassee. Johnson, Jackson.

Kalamazoo, Kalama-200.t Kalamo, Eaton. Kaleaska, Kaikaska. Kasson, Leelanaw. Kawkawlin, Bay. Keelersville, Van Bu ren.\*

Kellogg, Allegan. Kendall, Van Buren. Kenockee, St. Clair Kensington, Oakland. Kent City, Kent.\* Kentville, Benzie. Kerby, Shiawassee. Kewadin, Antrim. Keystone, Grand Traverse.

erse. Kibbie, Van Buren. Kiddville, Ionia. Kilkenny, Oakland. Kilmanagh, Huron. Killmaster, Alcona. Kimbal. St. Clair. Kinde, Huron. Kinderhook, Branch. Kingsland, Eaton. Kingsley, Grand Traverse.\*

Hudson, Lenawee.\* King's Mill. Lapeer, Mill. Lapeer King's Mill. Lapeer. seph.

Klintner, Tuscola. Labarge, Kent. Lacey, Barry. Lacota, Van Buren. LaFayette, Gratiot. LaGrange, Cass. Laingsburgh, Shiawas-800.

Lake, Newaygo. Lake Brewster, Grand Traverse.

Lake City, Missaukee. Lake Cora. Van Buren. Lake Linden, Houghton.\* Lake Odessa, Ionia.\* Lake Port, St. Clair.

Lake Ridge, Lenawee. Lake Side, Berrien. Lakeview, Montcalm.\* Lakeville, Oakland. Lamb, St. Clair. Lambertville, Monroe. Lamont, Ott iwa. Lamotte, Sanilac. Lane, Ogemaw. Langston, Montcalm. L'Anse, Baraga.\* LANSING, Ingham.t LAPEER, Lapeer.† LaSalle, Monroe. Lathrop, Delta. Lawrence, Van Buren.\* Lawton, Van Buren.\* Layton Corners, Saginaw.

Leathem, Menominee. Leaton, Isabella. Lee, Allegan Leesburgh, St. Joseph. Maple Valley, Mont-Lee's Corner, Midland. calm. Leesville, Wayne. Leetsville, Kalkaska. Leitch, Sanilac. LELAND, Leelanaw. Lenawee Junction, Len-Marilla, Manistee awee.

Lennon, Genesee. Lenox, Macomb. Leonard, Oakland. Leoni, Jackson. Leonida, St. Joseph.t LeRoy, Osceola.\* Leslie, Ingham.\* Lester, Branch. Leutz, Saginaw. Levering, Emmet. Lexington, Sanilac.† Liberty, Jackson. Lickley's Corners, Hillsdale.

dale.

Lilley, Newaygo.

Lima, Washtenaw.

Lincoln, Mason.

Linden, Genesee.

Linwood, Bay.

Lisbon, Ottawa.\*

Litchfold, Hills.\* Litchfield, Hillsdale.\* Littlefield, Emmet. Little Harbor, Schoolcraft

Cass.

Little Prairie Ronde. Little River, Menominee. Livonia, Wayne. Locks, Ingham. Lockwood, Kent. Lodi, Kalkaska. Logan, Kent. London, Monroe. Long Rapids, Alpena. Loomis, Isabella.\* Lorenzo, Kent. Lowell, Kent.\* Lucas, Missaukee. LUDINGTON, Mason.† Lulu, Monroe. Lum, Lapeer. Luther, Lake.\* Luzerne, Oscoda. Lynn, St. Clair. Lyons, Ionia.\*

Lyons, Ionia.\*

McBride's, Montcalm.

McClure, Gladwin.

McCord's, Kent.

McDonald, Van Buren. McIvor, Iosco. McMillan, Luce.

Mack City, Oscoda. Mackinac Island, Mack-

Mackinaw City, Che-boygan.\*

inac.\*

Macomb, Macomb. Macon, Lenawee. Madison, Livingston. Mancelona, Antrim.† Manchester, Washtenaw.\*

Manistee, Manistee, † MANISTIQUE, Schooloraft. Manning, Cheboygan. Manton, Wexford.\*

Manton, Wexford.\* Maple, Ionia. Maple City, Leelanaw. Maple Grove, Barry. Maple Hill, Montcalm. Maple Rapids, Clinton.\* Maple Ridge, Arenac. Mapleton, Grand Trav-

Marble, Mason. Marcellus, Cass.\* Marengo, Calhoun, Marenisco, Gogebic. Marine City, St. Clair.\* Marion, Osceola. Markell, Tuscola. Marlette, Sanilac.\* Mar-MARQUETTE,

quette.†

MARSHALL, Calhoun.† Marshville, Oceana. Martin, Allegan.\* Martiney, Mecosta. Martinville, Wayne. Marysville, St. Clair. Mason, Ingham.\* Masonville, Delta Mastodon Mine, Iron. Matherton, Ionia. Mattawan, Van Buren.\* Mattison, Branch. May, Tuscola,† Maybee, Monroe. Maybury, Wayne. Mayfield, G'd Traverse.

Mayfield, G'd Traverse. Musskgon, Muskegon, †
McCord's, Kent.
Meade, Macomb.
Meade, Macomb.
Mears, Oceana.
Mankin, Wayne.
Meauwataka, Wexford.
Naomi, Berrien. Mecosta, Mecosta.\* Medina, Lenawee. Melita, Bay. Melvin, Sanilac. Memphis, Macomb.\* Mendon, St. Joseph.\* MENOMINEE, Menomi-

nee.t Meredith, Clare. Meridian, Ingham. Merrill, Saginaw.\* Metamora, Lapeer.\* Metropolitan, Iron. Michie, Bay. Michigamme, Mar-

quette.+ Michigan Centre, Jack-

son. Middleton, Gratiot. Middleville, Barry.\* MIDLAND, Midland.† Mikado, Alcona. Milan, Washtenaw.\* Milburn, Oscoda. Milford, Oakland.\* Millbrook, Mecosta.\* Millburgh, Berrien. Mill Creek, Kent. Millett, Eaton

gan. Mill Grove, Allegan. Millington, Tuscola.\* Millington, Tu Mills, Sanilac. New Troy, Berrien.

Milo, Barry. Milton, Macomb. Minden City, Sanilac.\* Mio, Oscoda.\* Miriam, Ionia. Mitchell, Antrim. Moline, Allegan. MONROE, Monroe, t

Monroe Centre, Grand NorthAurelius, Ingham Traverse. North Bradley, Midland Montague, Muskegon. the North Branch, Lapert Monteith, Allegan. North Burns, Huron. Monterey, Allegan. North Dorr, Allegan. Monteith, Allegan. North Burns, Huron. Monterey, Allegan. North Dorr, Allegan. Montgomery, Hillsdale. North Farmington. Montrose, Genesee. Moon, Muskegon. North Irving, Barry.
Moore Park, St. Joseph. North Manitou Island,
Moorestown, Missaukee Manitou. Moorland, Muskegon. Moran, Mackinaw. Morenci. Lenawee.\* Morey, Missaukee. Morgan, Barry. Morley, Mecosta.\*

Morocco, Monroe. Morrice, Shiawassee. Moscow, Hillsdale Mosherville, Hillsdale.‡ Mossback, Kalkaska. Mottville, St. Joseph. MT. CLEMENS, Macomb, † MT. CLEMENS, MACOMO. T Mt. Forest, Bay. Mt. Morris, Genesee.\* MT. PLEABANT, Isabellat Mt. Salem, St. Clair. Mt. Vernon, Macomb. Novi, Oakland. Mud Lake, Alcona. Muir, Ionia.\*

Mullet Lake, Cheboy Mulliken, Eaton. Mundy, Genesee. Munger, Bay. Munising, Alger. Munith, Jackson. Munson, Lenawee. Murray, Sanilac.

Napoleon, Jackson.\* Nashville, Barry.\* National Mine, Marquette.

Naubinway, Mackinaw, Navan, Genesee. Neebish, Chippewa Negaunee, Marquette, † Nelson, Saginaw. Nestoria, Baraga. Newark, Gratiot. NEWAYGO, Newaygo. † New Baltimore, Ma

Macomb.\* NEWBERRY, Luce.\* New Boston, Wayne. New Buffalo, Berrien.\* New Era, Oceana.\*

New Era, Oceana.\* Onota, Alger. NewGroningen,Ottawa Onsted, Lenawee. New Haven, Macomb.\* Ontario, Lenawee. Haven Centre, Ontonagon, Ontona-

Gratiot.

Newport, Monroe. New Salem, Allegan. Newtownville. Baraga. Niles, Berrien.+ Nirvana, Lake, Noble, Branch. Noordeloos, Ottawa Norris, Wayne. Norrisville, Leelanaw. North Adams, Hills dale.\*

Oakland.

North Morenci, Lens-

wee North Muskegon, Muskegon.\* North Newberg, Shia-

wassee. Northport, Leelanaw.\* North Star, Gratiot.\* North Street, St. Clair. North Unity, Leelanaw. Northville, Wayne.\* Norvell, Jackson. Norway, Menominee.\* Norwood, Charlevoix. Nottawa, St. Joseph. Novesta, Tuscola.

Nunica, Ottawa.\* Oak, Wayne. Oakdale Park, Kent. Oakfield Centre, Kent. Oak Grove, Livingston.
Oak Hill, Manistee.
Oakley, Saginaw.\*
Oakville, Monroe.
Oakwood, Oakland.
O'Brien, Ontonagon.†
Oceola Centre, Livingston.

Ocqueoc, Presque Isla. Oden, Emmet

Odessa, Oscoda, O'Donnell, Barry. Ogden, Lenawee. Ogden Centre, Lenawee Ogemaw Springs, Ogemaw.+

Ogontz, Delta Okemos, Ingham. Ola, Gratiot. Old Mission, Grand Traverse. Olds, Branch.

Olive Centre, Ottawa. Olivet, Eaton.\* Olney, Shiawassee, Omard, Sanilac. Omena, Leelanaw. Omen, Arenac.\* Onekama, Manistee.\* Onondaga, Ingham.

gon. New Hudson, Oakland, Opechee, Houghton. New Holland, Ottawa, Orange, Ionia. New Lothrop, Shiawas- Orangeville Mills, Barry Orchard Hill, Alpena Orchard Lake, Oakland New Richmond, Alle-Oregon, Lapeer,

Orion, Oakland.\* Orleans, Ionia. Orono, Osceola Ortonville, Oakland.\*

Orville, Mackinac. Osborn, Benzie. Oscoda, Iosco.† Oshtemo, Kalamazoo. Oskar, Houghton. Osseo, Hillsdale. Ossineke, Alpena. 0tia, Newaygo. Otisco, Ionia. Otseco, Ionia.

Otseylle, Genesee.\*

Otsego, Allegan.\*

Otsego Lake, Otsego.\*

Otsewa Beach, Ottawa.

Pompeii, Gratiot.

Ottawa Station, Ottawa.

Pompeie, Huron.

Ottawa Station, Ottawa.

Ottawa Concasa. Otterburn, Genesee. Otter Creek, Jackson. Otter Lake, Lapeer. Otter Lake, Lapes Overisel, Allegan. Oviatt, Leelanaw. Ovid, Clinton.\* Owens, Missaukee. Owosso, Shiawassee.\*

Ox Bow, Oakland.

Oxford, Oakland.\*

Ozark, Mackinae. Paine's, Saginaw. Paint River, Iron. Palmer, Marquette. Palm Station, Sanilac. Palmyra, Lenawee. Palo, lonia. Paris, Mecosta Parisville, Huron. Parkinson, Gratiot. Parkville, St. Joseph. Parma, Jackson. Parmelee, Barry.
Parshallville, Livingston. Partello, Calhoun.
Pavilion, Kalamazoo.
Paw Paw, Van Buren. Paw Paw, Van Burer Peach Belt, Allegan. Pearl, Allegan. Peck, Sanilac. Pellston, Emmet. Pembina, Menominee. Penasa, Osceola. Penn, Cass. Pentecost, Lenawee. Pentwater, Oceana.† equaming, Baraga Pere Cheney, Crawford Perrinton, Gratiot. errinton, Gratiot.
errinsville, Wayne.
erry, Shiawassee.†
etersburg, Monroe.\*
etoskey, Emmet.†
ettysville, Livingston. ewamo, Ionia.\* hœnix. Keweenaw. ickford, Chippewa. ierport, Manistee. ierson, Montcalm.\* ike's Peak, Wayne. inckney, Livingston.\* inconning, Bay. Redford, Wayne ine Creek, Calhoun. Red Jacket, Housine Grove Mills, Van Redman, Huron. Buren ine Lake, Ingham. ine Run, Genesee. ines, Mackinaw, innebog, Huron, ioneer, Missaukee. iper, Ogemaw. ipestone, Berrien. ipestone Station, Berlainfield, Livingston.

Plainwell, Allegan.\* Plank Road, Wayne. Platte, Benzie. Pleasant, Kent. Pleasanton, Manistee Pleasant Valley, Midland. Pleasant View, Emmet. Plymouth, Wayne.\* Pointe au Frene, Chip-Portage, Kalamazoo. Port Austin, Huron.\* Port Crescent, Huron. Porter, Midland. Port Hope, Huron. Port Huron, St. Clair. † Portland, Ionia. Portland, Ionia.\* Rock River, Alger.
Port Oneida, Leelanaw. Rockwood, Wayne.
Port Sanilac, Sanilac.\* Rodney, Mecosta.\*
Portsmouth, Bay.\* ROGERS CITY, Presque Port Sanilac, Sanilac.\* Portsmouth, Bay.\* Posen, Presque Isle, Potterville, Eaton. Potts, Oscoda. Poulsen, Mason. Powers, Menominee. Prairieville, Barry. Prattville, Hillsdale. Prentis Bay. Mackinac. Prescott, Ogemaw. Presque Isle, Presque I. Price, Clinton. Print, Benzie. Pritchardville, Barry. Prospect Lake, Van Buren. Provemont, Leelanaw. Frudenville, Roscommon. Pulaski, Jackson. Quaker, Leelanaw. Quanicassee City, Tuscola. Quincy, Branch \* Royce, Oscoda. Quinnesec, Menominee\* Ruby, St. Clair. Raisin Centre, Lenawe Rushton, Livingston. Raisinville, Monroe. Rustford, Mecosta. Ramsay, Gogebic. Randall, Saginaw. Rankin, Genesee. Rann's Mill, Shiawassee Ransom, Hillsdale. Rapid River, Delta, Rapinville, Mackinac. Rapson, Huron. Rapson, Huron.
Rattle Run, St Clair.
Ravenna, Muskegon.\*
Rawsonville, Wayne.
Ray Centre, Macomb.
Rea, Monroe.
Reading, Hillsdale.\* Readmond, Emmet. Redfield, Cass. Redford, Wayne. Red Jacket, Houghtont Reed City, Osceola.\* Reed's, Kent. Reese, Tuscola. Remus, Mecosta, Reno, Ottawa. Republic, Marquette\* Rew, Clinton. Reynold, Montcalm. ipestone, Berrien. seynold, Montcaim. Sandstone, Jackson. ipestone Station, Ber-Rice Creek, Calhoun. Richfield, Genesee. ittsburgh, Shiawassee Richland, Kalamazzo.\* Sarnaca, Ionia.\* ittsfield, Washtenaw. Richmond, Macomb.\* Saugatuck, Allegan.\* ittsford, Hillsdale.\* Richmondville, Sanilac. Sautur De Ste. Marie, limited Livingston. Richville, Tuscola,

Ridgeway, Lenawee. Riga, Lenawee. Riggsville, Cheboygan. Riley, Clinton. Riley Centre, St. Clair. Ripley, Houghton. River Bend, Clinton. Riverdale, Gratiot. River Raisin, Wa Washtenaw Riverside, Berrien.
Riverton, Mason.
Rives Junction, Jackson Selkirk, Ogemaw.
Roberts' Landing, St. Seneca, Lenawee. Clair. Robinson, Ottawa. Rochester, Oakland.\* Rock, Delta Rockery, Antrim. Rockford, Kent.\* Rockland, Ontonagon. Isle.\* Rogersville, Genesee. Rollin, Lenawee. Rome, Lenawee. Romeo, Macomb.t Romulus, Wayne. Rondo, Cheboygan. Roots, Jackson. Roscommon, Roscommon.\* Rose, Oakland. Roseburgh, Sanilac. Rosedale, Chippewa. Roseville, Macomb. Rosina, Ionia. Ross, Kent. Rothbury, Oceana. Rowland, Isabella. Roxana, Eaton. Roy, Alcona. Royal Oak, Oakland. Royalton, Berrien. Ruth, Huron. Ryerson, Muskegon. Ryno, Oscoda. SAGINAW, Saginaw.†
St. Charles, Saginaw.\*
St. Clair, St. (lair.† Clair. Clair.
St. Elmo, Midland.
St. Helen, Roscommon.
St. IGNACE, Mackinac.† South Allen, Hillsdale.
St. James, Beaver Is-South Arm, Charlevoix land, Manitou.\*
South Blendon, Ottak St. Johns, Clinton.† St. Joseph. Berrien.† St. Louis, Gratiot.† Salem, Washtenaw. Saline, Washtenaw.\* Salzburgh, Bay. Samaria, Monroe. Sammon's Landing, Oceana. Sand Beach, Huron.† Sand Hill, Wayne. Sand Lake, Kent.\* Sands, Marquette. Sandstone, Jackson. Sandusey, Sanilac.\* Sanford, Midland. Chippewa.t

Sawyer, Berrien. Scammon, Chippewa. Schaffer, Delta. Schoolcraft, Kalamazoo.\* Scio, Washtenaw. Scoffeld, Monroe. Scott's, Kalamazoo.\* Scott's, Kalamazo Scottville, Mason. Sears, O-ceola. Seney, Schoolcraft.\* Sethton, Gratiot. Seymour Lake, Oakland. Shabbona, Sanilac. Shaftsburgh, Shiawassee Shaw, Presque Isle. Shaytown, Eaton. Shelby, Oceana. Shelby ville, Allegan. Shepardsville, Clinton. Shepherd, I-abella.\* Sheridan, Montcalm.\* Sherman, Wexford.\* Sherman City, Isabella. Sherwood, Branch.\* Shetland, Leelanaw. Shiloh, Ionia. Shingleton, Alger. Shoup, Oakland, Sickels, Gratiot. Siddons, Mason. Sidney, Montcalm. Sigel, Huron. Silver Creek, Allegan. Simons, Antrim. Sister Lakes, Van Bu-Six Lakes, Montcalm. Skanee, Baraga. Slocum's Grove, Muskegon. Smith, St. Clair. Smith's Corners, Oceana. Smith's! Creek, Saint Clair. Smyrna, Ionia. Snowflake, Antrim. Sodus, Berrien. Solon, Leelanaw Clair, St. ( lair.† Somerset, Hillsdale. Clair Springs, St. Somerset Centre, Hills dale. South Boardman, Kalkaska.\* South Butler, Branch. South Camden, Hillsdale. South Cass, Ionia. South Fairfield, Lena-Southfield, Oakland. South Frankfort, Ben-zie.\* South Grand Blanc, Oakland. South Grand Rapids, Kent. South Haven, Van Buren.\* South Jackson, Jackson. South Lyon, Oakland.\*

South Monterey, Allegan

South Riley, Clinton. South Rockwood, Mon-

roe. Sova, Cheboygan. Spalding, Menominee. Sparta, Kent.† Speaker. Sanilac. Spencer Creek, Antrim. Spencer's Mill, Kent. Spink's Corners, Ber-

Arbor, Jack-Spring son.;

Springdale, Wexford. Spring Grove, Allegan. Spring Lake, Ottawa.\* Springport, Jackson.\* Spring Vale, Charle-VOIX.

Springville, Lenawee. Stacy, Grand Traverse. Stalwart, Chippewa Stambaugh, Iron. Standish, Arenac.\*
Stanton, Montcalm.†
Stanwood, Mecosta.
Star Citv, Missaukee.
Stark, Wayne.
Starville, St. Clair.
Stearns, Midland.
Steiner, Monroe.
Stalla Creatiot. Stambaugh, Iron. Steiner, Monro Stella, Gratiot Menom-Stephenson,

inee. Sterling, Arenac. Stetson, Oceana. Stevensburgh, Chip-

Stevensville, Berrien.\* Stirlingville, Chippewa. Stittsville, Missaukee. Stockbridge, Ingham.\* Stony Creek, Washte-

naw. Stony Point, Jackson. Stover, Antrim. Strasburgh, Monroe. Strickland, Isabella. Stronach, Manistee. Strongville, Chippewa. Sturgis, St. Joseph.\* Sugar Grove, Mason. Sullivan, Muskegon. Summerfield, Clare. Summerton, Gratiot. Summerville, Cass. Summit City, Grand

Traverse. Sumner, Gratiot.\* Sun, Newaygo. Sunfield, Eaton. Superior, Chippewa. Sutton, Lenawee.‡ Sutton's Bay, Leelanaw Swartz Creek, Gene-see.‡

Sylvan, Washtenaw

New post-offices: Alcona Co.—Glennie Sta-ton, Winters; Allegan— Alger-Hallston, Oakland; Arenac-Shearer; Baraga Belknap, -Redruth; Barry-Shultz; Berrien-Ha bert, Hollywood; Branch-Gorton; Calhoun –Harnert, Hollywood; Branch—Gorton; Calhoun— Groverville; Chippewa—Trout Lake, Wells-burg; Clare—Dodge, Lake George; Houghton —Farnham, Laird; Huron—Goodman; Ing-ham—Harris; Ionia—Elmdale; Iosco—Hale, Siloam; Iron—Sagola, Saunders; Jackson—

South Manistique, Sylvester, Mecosta. School raft. South Manitou, Mani-tou, Tallmadge, Ottawa. Tallman, Mason. TAWAS CITY. Iosco. Taylor Cen re, Wayne. Taymouth, Saginaw. Tecumseh, Lenawee.\* Tekonsha, Calhoun.\* Temperance, Monroe. Texas, Kalamazoo. Thayer, Oakland. Thomas, Oakland Thompson, Schoolcraft Wacousta, Clinton, Thornton, St. Clair. Wadsworth, Huron Thornville. Lapeer. Thorp, Wexford. Three Oaks, Berrien.t Three Rivers, St. Joseph.1 Thumb Lake, Charlevoix. Thurber, Lenawee. Tipton, Lenawee. Tompkins, Jackson. Tonquish, Wayne. Topinabee, Cheboygan. Torch Lake, Antrim. Totten, Lake. Towns, Branch. THAVERSE CITY, Grand Traverse.t Trent, Muskegon. Trenton, Wayne. Trowbridge, Cheboygan. Troy, Oakland. Trufant, Montcalm.\*

Turin, Marquette. Tuscola, Tuscola.\* Tustin, Osceola.\* Twin Lake, Muskegon. Tyre, Sanilac. Tyrone, Livingston, Tyrrell, Oscoda, Tyrrell,

Tyrrell, Oscoda.
Ubly, Huron.
Ula, Kent.
Unadılla. Livingston.
Undine, Charlevoix.
Union, Cass.
Union City, Branch.\*

Union Home, Clinton. Union Pier, Berrien. Unionville, Tuscola.\* Upton, Clare. Upton Works, St. Clair. Urania, Washtenaw. Urban, Sanilac. Utica, Macomb.\*

Valley Centre, Sanilac. West Haven, Shiawa-Vandalia, Cass \* see. Van Decar, Isabella. Vanderbilt, Otsego. Van Zile. Houghton.

Vassar, Tuscola.† Venice: Shiawassee. Ventura, Ottawa. Vermontville, Eaton.\*

Verne, Saginaw. Vernon, Shiawassee.\* Verona Mills, Huron. Vestaburgh, Montcalm.\* Zion, St. Clair.

Victor, Clinton. Victory, Mason. Vienna, Montmorency.

Vine, I. sco. Vogel Centre, Missau-Volinia, Cass.; Volney, Newaygo. Vriesland, Ottawa.

Vulcan, Menominee. Walijamega, Tuscola Wakefield, Gogebic.\* Wakelee, Cass. Tuscola. Waldenburgh, Macomb White Rock, Huron.

Waldron, Hillsdale. Wales, St Clair. Walker, Kent. Wallace, Menominee.
Wallace, Menominee.
Wallaceville, Wayne.
Walled Lake, Oakland.
Whitney, Menominee.
Weltz, Wayne.
Weltz, Wayne.
Warren, Macomb.
Wasepi, St. Joseph.
Washlenge, Menominee.
Whittaker, Washlenge, Menominee.

Washington, Macomb. Waterford, Macomb. Waterloo, Jackson. Waters, Otsego.

Watersmeet, Gogebic. Watervliet, Berrien.\* Watrous ille, Tuscola.\* Watson, Allegan.

Wauceda, Menominee. Wayland. Allegan.\*
Wayne, Wayne.\* Webberville, Ingham.\* Web-ter, Washtenave Weldon, Benzie. Weldon Creek, Mason.

Wellington, Crawford, Wells, Delta. Wellsville, Lenawee We-que-ton-sing, Em-

West Bay City, Bay. † WEST BRANCH, Ogemaw.\* West ('ampbell, Ionia. West Carlisle, Kent. West Casco, Allegan, West Detroit, Wayne, West End, Wayne,

West Harrisville, Alcona

West Leroy, Calhoun. West Millbrook, Mecosta

West Olive, Ottawa. Weston, Lenawee. Westphalia, Clinton. West Sebewa. Ionia. West Sumpter, Wayne. West Troy, Newaygo. Westville, Montcalm. West Windsor, Eaton. Westwood. Kalkaska.

Zutphen, Ottawa.

Vickeryville, Montcalm Wetzell, Artrim. Vicksburgh, Kalama Wexford, Wexford 200.\* Wheatfield, Calhoun Wheatland, Hillsdale. Wheeler, Gratiot, Whipple, Grand Trav-

erw White, Hillsdale, White Cloud, Newaygo\* Whitefish Point, Chip-

pewa. Whiteford Centre. Monroe. Whitehall, Muskegon.\*

White Lake, Oakland. White Oak, Ingham. White Pigeon, St. Joseph.\*

Whiteville, Isabella Whitewood, Wayne Whiting, Lapeer

Whittemore, Iosco. Wickware, Sanilac. Wilderville, Calhoun

Wildwood, Cheboygan Willard, Bay. Williams, Kalamazoo. Williamsburgh, Grand Traverse Williamston, Ingham. Williamsville, Cass.

Williamsvine, Cass.
Willis, Washtenaw.
Wiley, Mason.
Wilmot, Tuscola.
Wilson, Menominee.
Winfield. Ingham. Wingleton, Lake. Winterfield, Clare. Wise, Isabella. Wisner, Tuscola. Wixom, Oakland.

Wolverine, Cheboygan Woodburn, Oceana Woodin's Mills, Isabella Wood Lake, Montcain Woodland, Barry.\* Woodmere, Wayne. Wood's Corners, Ionia

Woodstock, Lenawe Woodville, Newaygo Wooster Hill, Newaygo Worden, Washtenaw Worth, Arenac.

Wright, Ottawa. Wright's Bridge, Midland. Wyandotte, Waynet

Wyman, Montcalm. Yankee Spring, Barry Yates, Manistee. York, Washtenaw. Yorkville, Kalamazoo, Ypsilanti, Washtensw Yuba, Grand Traverse

Zeeland, Ottawa.\* Zilwaukee, Saginaw.

Cedar Bank, Eldred, Minard, Snyder; Kent Ballard's, Gooding. Parnell; Lake—Raigu Ballard's, Gooding. Leclanaw — Keswick - Manite - Keswick ; Lenawee -Levianaw Aeswick; Lenawee — manne Beach; Mackinac—Hunt Spur, Kenned Viola; Marquette—Swanzy; Mecosta—Bo land, Stimeor; Montealm—Miller; Newsyns Hitely, Brookings, Fields, Hawkins, Ke Kirk; Ogemaw—Hunt; Ontonagon—Bu Kennedy Station, Interior, Matchwood, Trout Con-—For additional post-offices see page.

### Detroit and Wayne County.

City Covernment, 1890.

[Compiled from Kronberg's Municipal Manual, with corrections.]

Mayor—Hazen S. Pingree. Salary, \$1200.
Controller—John B. Moloney. \$2000.
Deputy Controller—Peter Rush. \$2000.
City Clerk—Augustus G. Kronberg. \$2500.
Deputy City Clerk—James H. Kelly. \$2000.
City Treasurer—Thomas P. Tuite. \$2000.
Deputy City Treasurer—John W. Corcoras.

Mol. William Kock, Martin Bayer.

Sth—John N. Arens, James Cornell.

Sth—Tohn N. Arens, James Cornell. **\$2000** 

Receiver of Taxes—Chas. K.Trombly. \$2500. Assistant Receiver of Taxes—James W. Shields. \$2000.

City Counselor—John W. McGrath. \$2500. Assistant City Counselor—Ed. Minock. \$1500. City Attorney—Chas. W. Casgrain. \$2500.

Assistant City Counselor—Ed. Minock. \$1500. City Attorney—Chas. W. Casgrain. \$2500. Assistant City Attorney—\$2,000. City Engineer—Wm. Voigt. Jr. \$2500. City Engineer—Wm. Voigt. Jr. \$2500. Historiographer—Silas Farmer. No salary. Gas Inspector—James Rodgers. \$1004. Market Clerk—Hiram Jackson. \$1500. Boiler Inspector—Gustave Pfeiffer. \$1600. Engineer City Hall—Michael Carney. \$1300. Elevator Engineer—James Linn. \$1084. Weighmasters—Eastern district, Anthony Sements: western district, Anthony Sements: western district. Edward E. Hes-

Clements; western district, Edward E. Hes-

n. \$1100 each. Poundmasters—Eastern district, Dominick atour; western district, Anthony Karschina.

\$900 each.

Meat Inspectors—Eastern district, Charles Eggeman; western district, Peter Hirth. \$1200 each.

Inspectors of Chimneys-Charles Hauser, Leroy Carway.

COMMON COUNCIL.

The Board of Aldermen is composed of two members from each of the 16 wards, 82 in all, members from each of the 16 wards, 32 in all, who each receive an annual salary of \$600. Half the board are elected at the November election each year, and the terms are for two years. The following will constitute the Board of Aldermen for 1890, commencing on the second Tuesday of January, 1890:

1st Ward—George Dingwall, Walter H. Coots.

Coots.

2d—James Vernor, Julius P. Gillmore. 3d—George F. Reichenbach, Frank N. Reves.

th—Lou Burt, Stephen A. Griggs.

5th—John Chr. Jacob, Chas. P. Karrer.

6th—James Lennane, Cyrus B. Barnes.

7th—Frank T. Bleser, Albert Roth.

8th—Frederick Cronenwett, Murray Wat-

9th—Frank Schmidt, Ernest L. Reschke. 10th—Anthony H. Reynolds, Charles A.

Buhrer.

11th—Henry Boettcher, Wm. Rickert.

11th—Robert H. Murphy, James Brennan.

18th—John Kessler, William O'Regan.

14th—Neil Grant, William Uthes.

18th—Frank Smith, George Scott.

16th—Frank Wotzke, Ferdinand Amos.

The second-named aldermen were elected last November. James P. Murtagh was elected last November as alderman of the Ninth ward, to fill the unexpired term of Chas. K. Trombly, resigned. Murtagh's term expires on the second Tuesday of January,

#### BOARD OF ESTIMATES

At large—Anthony Petz, Louis P. Campau, Rootten, James L. Edson, John N. Ward—John J. Mulheron, Wm. R. Far-

4th—Edwin C. Hinsdale, Walter G. Sheley.
5th—John Chateau, Theodore Gorenfo.
5th—Henry Whalen, Patrick H. Hickey.
7th—J. William Kock, Martin Bayer,
5th—John N. Arens, James Cornell.
9th—Fred J. Wuellner, Anthony Valentine.
10th—Fred A. Remington, Charles Appelt.
11th—Nicholas Sinig, William Sauer.
12th—Albert Taepke, Adam Hoffman,
18th—George Galster, Peter Steinus.
14th—Richard Beaubien, Alex. Nelson,
15th—Cristopher Damitio, Camille de Voge-

15th-Cristopher Damitio, Camille de Voge-

16th—John Markey, Samuel Hargreaves.
The Board of Estimates is composed of 32 members, two from each ward, half of whom are elected at the November election of each year. The members of the Board ex officio are the President of the Common Council and Chairman of its Committee of Ways and Means, the City Controller, City Counselor, President of the Board of Education, the Boards of Water, Police, and Fire Commissioners, and the senior members of the Boards of Public Works and of Inspectors of the House of Correction. They take part in the deliberations of the Board, but do not vote. It is the office of this Board to consider the general city estimates and all measures 16th—John Markey, Samuel Hargreaves the general city estimates and all measures for raising money by tax-levy or bond-issues, and to decrease or disapprove, but not increase, the same. Only amounts approved by the Board can be raised. Members receive \$8 for each day of actual session. The firstnamed in each ward will go out of office in one year, the second-named in two years.

one year, the second-named in two years.

BOARD OF FIRE COMMISSIONERS.

President, W. J. Stapleton.
Vice-President, R. W. Gillett.
Secretary, James E. Tryon. \$2200.

Members, Marsh H. Godfrey, W. J. Stapleton, R. W. Gillett, Bruce Goodfellow.
Chief Engineer, James Battle. \$2500.

Assistant Chief Engineer and Supply Agent,
James R. Elliott. \$1800.

District Engineers, John Kendall, James C.

Broderick. Each \$1200.

Superintendant Telegraph, Wm. J. Gardiner. \$1500.

\$1500.

Department Surgeon, Wm. Brodie, M. D. Fire Marshal, Wm. H. Baxter. \$1800. Verterinary Surgeon, Robert Jennings. \$350.

BOARD OF WATER COMMISSIONERS.
President, Jacob S. Farrand.
Vice-President, Samuel G. Caskey.
Secretary, L. N. Case. \$2400.
Assistant Secretary, Thomas R. Putnam.

Superintendent, Henry Bridge. \$2400. Engineer, John E. Edwards. \$2200. Members, Samuel G. Caskey, Jacob S. Far-and, John Pridgeon, Joseph Nagel, August Goebel.

BOARD OF INSPECTORS OF THE HOUSE OF CORRECTION.

Inspectors, Wm. J. Chittenden, Albert Ives, Jr., F. Wm. Lichtenberg, Jeremiah Dwyer. Superintendent, Joseph Nicholson. \$3000. Physician, Augustus Kaiser, M. D. \$600.

BOARD OF POOR COMMISSIONERS. President, Siegmund Simon. Vice-President, W. K. Muir. Treasurer, Joseph B. Moore.

Secretary, P. H. Dwyer. \$1200. Superintendent, J. T. Martin. \$1500. Members, W. K. Muir, S. Simon, Joseph B. Moore, Geo. Lane.

#### BOARD OF POLICE COMMISSIONERS.

President, Wm. C. Colburn. Secretary, L. B. Meserve. \$2500. Members, Wm. C. Colburn, Horace M. Dean, Sidney D. Miller, Frank J. Hecker. Superintendent of Police, Jas. E. Pittman.

Deputy Superintendent, M. V. Borgman. \$1800.

Captains of Police, C. C. Starkweather, Joseph Burger, W. H. Myler, Jesse Mack. Each, \$1700.

Risco, \$1700.
Sergeants of Police, A. H. Bachman, A. H. Britton, Wm. Thompson, Ben High, Eugene Sullivan, G. H. Thompson, Joseph F. Krug, John Martin, E. F. Cuiver. Each, \$1000.
Attorney, Charles M. Swift. \$1000.
Surgeon, J. B. Book, M. D. \$1000.

#### BOARD OF PUBLIC WORKS.

President, Thomas McGrath. Secretary, John Campbell. \$2000. Accountant, J. C. Oldfield. Permit Clerk, Frank X. Lingemann. Sidewalk Inspectors, John Demass, Jr., Michael Foley, Walter V. Kies, John A. Wilkie, James Downs, Thomas A. Coleman. Each \$1084.

Members of Board, Thomas McGrath, Wm. H. Langley, James Hanley. Each, \$2500.

#### BOARD OF ASSESSORS.

Assessors, Charles M. Garrison, John J. Perren, Theodore Rentz. Each \$2500.
Assistant Assessors, James L. Buchanan, John Haire, John C. Kinsel. Each \$1500.
Chief Clerk, Michael Halloran. \$2000.

President, William Voigt, Jr.
President, William Voigt, Jr.
President pro tem, Thomas F. Halloran.
Secretary, Jno. R. King. \$2500.
Treasurer, John S. Schmittdiel.
Superintendent of Schools, Wm. E. Robinson. \$4000. Supervisor of Property, Robert Wallace. \$2000.

Members. 1st Ward-Henry A. Chaney, term expires

June 30, 1991.

2d.—Willard M. Lillibridge, June 30, 1891.

3d.—Frederick W. F. Brede, June 30, 1891.

4th.—Mrs. S. C. O. Parsons, June 30, 1891. 5th—Wm. G. Springer, June 30, 1891. 6th—Thomas F. Halloran, June 30, 1891. 7th—John B. Todenbier, June 30, 1891. 7th—John B. Todenbier, June 80, 1891. 8th—Thomas F. Comerford, June 80, 1891. 9th—William Voigt, Jr., June 30, 1893. 10th—Johnston Stuart, June 30, 1893. 11th—Frank X. Lingemann, June 30, 1893. 12th—David Ferguson, June 30, 1893. 18th—Thomas Berry, June 30, 1893. 14th—Dr. B. R. Hoyt, June 30, 1893. 15th—William Adair, June 30, 1893. 16th—Junes F. Ratigan. June 30, 1893.

16th-James F. Ratigan, June 80, 1893.

PUBLIC LIBRARY COMMISSIONERS.
President, George S. Hosmer.
Vice-President, Magnus Butzel.
Secretary, Herbert Bowen.
Treasurer or official John S. Schmitt Treasurer, ex officio, John S. Schmittdiel.

COMMISSIONERS OF PARKS AND BOULEVARD. President, George H. Russel. Vice-President, Wm. Livingstone, J. Secretary, John R. Stirling. \$2000.

Superintendent, Wm. Ferguson. \$2000. Members, George H. Russell, John Erhard, Wm. Livingstone, Jr., Wm. K. Parcher.

#### BOARD OF HEALTH.

Health Officer, Samuel P. Duffield, M. D. \$8000.

City Physicians, Angus McLean, M. D., M. H. Andrews, M. D., Hugo Erichsen, M. D. Each, \$1500.

F. Schulte, Wm. Lockhart, M. D. Clerks, A. F. 31400 and \$1084.

Disinfector, Waldo R. Clark. \$900.

Milk Inspector, Clifton H. Tilden. \$900.

Members, Peter Klein, M. D., Wm. Brodie,
M. D., E. A. Chapoton, M. D. Ex-officio, the
Mayor, Controller, and President of the Police
Commission.

#### JUDICIAL.

Recorder's Court.
Judge, George S. Swift, \$4000.
Associate Judge, Fitzwilliam H. Chambera.
\$3000.

Clerk, George H. Lesher. \$1800. Deputy Clerk, Charles R. Bagg. \$1800. Stenographer, Wm. W. O'Brien. \$2000. Police Courts.

Police Justices, John Miner, Edmund Haug, Each, \$3000.

Clerk, P. J. Sheahan, \$1800. Assistant Clerks, Charles S. Hathaway, Jos.

Assistant ceres, Charles S. Hallaway, ov. Therry. Each, \$1200. Patrick J. Sheahan was elected Police Jus-tice at the November election, and will succeed John Miner on July 4, 1890.

Justices' Court.
Justices, Walter Ross, John Patton, Joseph C. Gibson, Overton L. Kinney.

Clerk, Wm. H. Baker. James Phelan was elected Justice in November election, and will succeed Joseph C. Gibson on July 4, 1890.

Gibson on July 4, 1890.

LICENSES.—Annual.—Steam ferry-boats, \$250; theatres, \$100; museum, \$50; circus and menagrie, one day, \$75; each following day, \$50; platform scales, \$36; pewnbrokers, \$300; pediers, two horse wagon, \$155; pediers, one horse wagon, \$100; pediers, foot, \$25; and tioneers, resident, year, \$10; auctioneers, norresident, per day, \$10; intelligence offices, \$5; passenger express, \$5; public carriages, \$5; one horse dray, \$2; two horse dray, \$3; funiture van, \$4; shooting gallerys, \$20; bowling alleys, billiard and pool rooms, per alley and table, \$5; porters and runners, \$5; public drivers, \$1; meat markets, 50 cents; meat pediers, per wagon, \$40; female dogs, \$1.10; engineers, \$1; firemen, \$10; ones; erstaurants, \$1; row-boat ferry, \$10; scavengers, \$1; newsboys, 10 cents; transiers shows, first day, \$5; each succeeding day, \$1; public conveyance operated by non-resident, per year, \$15. Licenses issued by the Mayor upon certificate from the Secretary of the folice Department that fees have been paid. lice Department that fees have been paid.

THE legal rates of hack or bus fare are 50 The legal rates of hack or bus fare are weents for carrying one person from one place to another within the city limits. Calidra under ten years of age, if accompanied by parents or guardians, are carried free to the number of two; half-fare for each beyond two. Any public conveyance may be hired by the hour for not more than four persons at the for the first hour, and \$1 for each additional terms of the first hour, and \$1 for each additional terms. for the first hour, and \$1 for each addit hour; each additional passenger. St count is hour. Carriages by the day, St trunk carried 15 cents may be charged, nothing for any piece of baggage well-ess than 50 lbs. Between 11 P. M. and St. one-helf more may be charged. one-half more may be charged.

### Officers of Wayne County.

Judges of the Circuit Court-George S. Hos-

Judges of the Circuit Court—George S. Hos-mer, Cornelius J. Reilly, Henry N. Brevoort, George Gartner. Salary, \$6000. Auditors—Charles P. Collins, Jas. Holihan, Geo. C. Lawrence. \$3500. Sheriff—Louis B. Littlefeld. Fees. Clerk—William P. Lane. \$3500. Treasurer—Ralph Phelps, jr. \$3000. Register of Deeds—Robert E. Bolger. \$3500. Judge of Probate—Edgar O. Durfee. \$4000. Prosecuting Attornay—Langes V. D. Willcox.

Prosecuting Attorney-James V. D. Willcox.

Surveyor-Thomas Campau. Fees. Circuit Court Commissioners—John Considine, jr., Lewis C. Watson. Fees. Coroners-Rich'd Toomey, Phil. H. Brown.

**\$**1200. Drain Commissioner—J. A. Steevens. Fees. Superintendents of the Poor—Pat. Blake\*, Alvin Seaman\*, Joseph B. Moore, Siegmund Simon, W. K. Muir, Theo. E. Deming\*.

\*\$600; others unsalaried.

BOARD OF SUPERVISORS.

Chairman-John Chr. Jacob. Clerk-William P. Lane. Assessor—Jeremiah D. Long. Clerk of Committees—Michael Halloran.

Clerk of Committees—Michael Halloran.

Messenger—David Ponnosky.

Members—Detroit, The Aldermen; Brownstown, Andrew W. Rrading, Flat Rock; Canton, Orlando R. Patteugill, Plymouth; Dearborn, Sam'l B. Long, Dearborn; Ecorse, Gustave A. Raupp, Ecorse; Greenfield, Timothy Kelley, Highland Park; Grosse Pointe, David Trombly, Grosse Pointe; Hamtramck, Roger Echlin, Highland Park; Huron, Jesse Butler, Beldeu; Livonia, R. L. Alexander, Livonia; Monguagon, Louis Groh, Trenton; Nankin, Chas. H. Cady, Wayne; Plymouth, Wm. H. Ambler, Northville; Redford, Thos. C. Houghton, Sand Hill; Romulus, Frank H. Rutter, Romulus; Springwells, Jas. H. Clixby, Deton, sand Hill; Romulus, Frank H. Rutter, Romulus; Springwells, Jas. H. Clikby, De-troit; Sumpter, Wm. A. Atyeo, Martinsville; Taylor, S. B. Lappeus, Dearborn; Van Buren, Perry Vorce, Rawsonville; Wyandotte, Robt. Mason, Chas. Chittenden, Denis Sullivan. \$3 a day, and fees in townships.

#### State Election of 1889 in Detroit and Wayne County.

	Just	TICE.	1	REGE	NTS.			Jus	JUSTICE.		REGENTS.			
	Sherwood, D.	Grant, R.	Lawrence, D.	Churchill, D.	Draper, R.	Cocker, R.		Sherwood, D.	Grant, R.	Lawrence, D.	Churchill, D.	Draper, R.	Cocker, R.	
lst Wd., Detroit. 2d	975 360 259 499 777 752 383 592 524 405 425 242 298 154 839 157	582 711 340 542 349 469 398 419 465 440 390 280 214 223 105 191	270 368 298 500 816 754 552 591 652 526 425 428 234 297 171 837	270 369 298 501 814 754 552 591 652 526 425 428 234 297 171 387	589 702 802 533 284 469 241 421 339 437 358 277 252 224 80 192 221	587 704 301 596 282 469 241 421 339 435 358 277 252 294 89 192 200	Ecorse. Greenfield. Grosse Pointe. Hamtramck. Huron. Livonia. Monguagon. Nankin. Plymouth Redford Romulus. Springwells. Sumpter. Taylor. Yan Buren. Wyandotte.	106 186 178 172 129 72 337 136 61 237 284	75 19 134 203 86 180 163 381 123 173 401 132 120 130 406	181 98 106 186 178 171 129 72 285 136 61 232 284	1199 1981 1811 98 1066 1511 1711 1299 72 2855 1366 611 232 284	75 19 134 203 86 180 162 381 123 71 401 132 120 185 407	19 184 203 86 180 190 381 123 71 401 183 120 185 407	
Canton Dearborn	105	198	104	104	198	198	Totals	9971	9743	10348	10368	9293	9318	

For Justice of the Supreme Court, James R. Lang, Prohib., had 308 votes, and Lawrence McHugh, Un.-Lab., 12. For Regents of the University, Russell M. Kellogg, Pro., had 375 votes, John Russell, Pro., 376, and Giles Mc-Allister and Elwyn Green, Un. Lab., 10 each.

THE valuation of Wayne county, as equalized for taxation in 1889, was \$143,993,438 for ized for taxation in 1889, was \$143,993,438 for Detroit, Brownstown \$866,578, Canton \$1.014,744, Dearborn \$1.202,218, Ecorse \$1,178,033, Greenfield \$2,538,207, Grosse Pointe \$2,001,263, Hamtramek, \$3,101,230, Huron \$534,848, Livonin \$955,677, Monguagon \$867,130, Nankin \$072,022, Plymouth \$2,152,594, Redford \$1,167,817, Romulus \$578,962, Springwells \$3,333,803, Sumpter \$387,140, Taylor \$391,036, Van Buren \$981,079, Wyandotte City \$551,428; total \$169,-108,748; total of townships and Wyandotte, \$25,175,310. Total taxation, \$618,932,18 — Detroit \$518,360,54, the rest \$100,571,64.

The assessed valuation of property in Detroit for 1889 was \$143,993,488, against \$152,-299,140 in 1888. The rate of taxation on this is \$14.99 per \$1000. The total valuation of the rest of Wayne county for 1889 was \$25,175,310, against \$28,377,000 the previous year. The present rate of taxation upon this is \$3.31 per \$1000.

The population of school age in Detroit last year was 63,009, against 65,132. This does not indicate real decrease, but probably rather a more honest and accurate school census. The number of children of school age in the public schools is 19,420; in sectarian and private schools, 12,489; not attending any school, 6,604.

THE death rate of the city for 1888 was 15.65 per 1000 inhabitants, based on an estimated population of 230,000.

#### Historical and Descriptive Sketch.

[From the last edition of "Michigan and its Resources."]

Wayne county was organized before the act | of Congress was passed establishing a govern-ment for Michigan Territory. By the treaty ment for Michigan Territory. By the treaty of peace between the kingdom of Great Britain and the United States, by which their inde-pendence was acknowledged in 1788, Michigan, which had formed a part of Canada, became a part of the United States. But for various reasons the English government still retained possession of the fort at Detroit, and for all practical purposes Michigan was treated as a part of Canada until after Jay's treaty in 1794. On the 18th of August, 1796, while Michigan formed a part of the Northwest Territory and

the seat of government was at Chillicothe in Ohio, Hon. Winthrop Sargent, then acting as Governor of the Northwest Territory during the temporary absence of General St. Clair, who was then Governor, issued letters-patent under the great seal of the Territory, establishing the county of Wayne. The boundary of the new county, as defined by acting-Governor Sargent, was as follows:

"Beginning at the mouth of the Cuyahoga river, upon Lake Erie [where Cleveland now is], and with the said river to the portage between it and the Tu-carawas branch of the Muskingum, thence down the said branch to Muskingum, thence down the said branch to the forks at the carrying-place above Fort Laurens, thence by a west line to the eastern b undary of Hamilton county (which is a due north line from the lower Shawnese town upon the Scioto river), thence by a line west-northerly to the southern part of the portage between the Miamis of the Ohlo and St. Mary's river, thence by a line also west-northerly to the southwestern part of the portage erly to the southwestern part of the portage between the Wabash and the Miamis of Lake between the Wabash and the Miamis of Lake Erie (the Maumee) where Fort Wayne now stands, thence by a line west-northerly to the most southern part of Lake Michigan [near Michigan City], thence along the western shores of the same to the northwest part thereof (including the lands lying upon the streams emptying into the said lake), thence have due north line to the territorial boundary by a due north line to the territorial boundary

in Lake Superior, and with the said boundary through Lakes Huron, St. Clair, and Erie to the mouth of the Cuyahoga river, the place of beginning.

It will be seen from this description that acting-Governor Sargent was not very well acquainted with the territory which he incorporated into the new county. Even at this day it would be somewhat difficult to draw a day it would be somewhat difficult to draw a map of Wayne county as then established. It comprised a considerable portion of the States of Ohio, Indiana, Illinois, Wisconsin, and nearly all of Michigan. The county seat was established at Detroit, which, amid all the numerous changes, still retains its position. After the establishment of the Territory of Michigan by an act of Congress, passed January 11 1805. Detroit became the capital of the ary 11, 1805, Detroit became the capital of the new Territory, and remained so during the entire existence of the Territory, and after-

wards of the State, until 1846.

Wayne county still retains a very important position in the State of Michigan. Instead of having nearly 200,000 square miles, it has gradually diminished until now it has only about 1000. Instead of covering the whole State, with a large proportion of Ohio, Indiana, Illinois, and Wisconsin, it is now diana, Illinois, and wisconsin, it is now bounded on the north by the counties of Oak-land and Macomb, on the east by Lake St. Clair and the River Detroit, on the south by the county of Monroe, and on the west by the county of Washtenaw. It still, however, retains its relative importance. It ranks first in population, in commerce, and in manufac-tures. Its industries are largely mechanical, although the county proper comprises a fine agricultural region, covered with valuable farms. Detroit, which for so many years was the seat of the fur trade with the Indians, has become one of the greatest railroad and manufacturing centers of the West, and the progressive spirit of its inhabitants, its great population and wealth, make it worthy of its position as the commercial metropolis of the great State of Michigan.

#### Population at Various Periods, Etc.

Wayne county, under the United States law, was taken in the year 1800, and found 8206 inhabitants, besides Indians. About nine tenths of those enumerated, or nearly 8000, were in Michigan, almost the whole of which was in this one county. The population included:

ciuaea:		Free	Free
			White
		Males.	Femal-
Under 10 ve	ars of age.	540	467
10, and und	er 16	201	198
16. "		832	252
26. "		584	198
45 and upw	ards	198	102
Other for	a pargang	excent Inc	liana n

Other free persons, except Indians not taxed 139. One-third of all enumerated lived at Detroit, and at least another third within

at Detroit, and at least abouter band what ten miles of that place.

For the census of 1810 the county was divided into four civil districts, which con-tained population as follow: Detroit, 2227; Erie, 1340: Huron, 580; Michilimackinac, 615. In 1820 Wayne county, then reduced to nar-

row limits, contained 2152 inhabitants, and the city 1422, the whole Territory 8896. In 1827 Detroit had 2152, and in 1830 the county had 6781 inhabitants; 1834, Wayne

The first census of the old and very large county, 16,638; 1837 (first State census), 23,400, vayne county, under the United States law, ras taken in the year 1800, and found 3206 Dearborn 1817. Exorse 709. Greenfield 897, bhabitants, besides Indians. About nine that the property of those enumerated, or nearly 3000. Mongragon 404, Nankin 1160. Plymouth 2246. Redford 1021. Romulus 389, Springwells 960, Van Buren 799.

In 1840 the county had 24,178 people; 1845, 82,287; 1850, 42,756; 1854, 64,709; 1870, 75,547; 1864, 68,292; 1870, 119,068; 1874, 144,908; 1880, 166,444; 1884, 188,966.

THE eight national banks in the city have a capital stock of \$4,400,000 and a surplus of \$557,000. The thirteen State banks have a capital stock of \$2,619,000, a surplus of \$354,500, and undivided profits of \$667,217. The savines deposits in State banks aggregate \$17,763,355.06. Total deposits in all the banks, \$32,979,112.16. The banks together have \$3,425,989.09 in actual cash on hand.

THE BOULEVARDS are still in course of construction. They are to have a total length of about nine miles, with a uniform width of 150 feet, having a 75-foot dimension in the middle.

#### City Elections.—1889.

City Lives.	0.101	
SPRING ELECTION.—SCHOOL INSPECTORS. Maj.	9th Ward-Wm. Voight, jr650	275
1st Ward—Henry A. Chaney816 762	John E. Clark375	
Benj. Eger 54	10th Ward—Johnston Stuart578	47
2d Ward-W. M. Lillibridge767 97	Geo. A. Winslow526	
Sarah E. Preston670	11th Ward—F. X. Lingemann685	505
3d Ward—Frederick W. Brede578 563	John A. Berry180	
Michael Dwyer 10	12th Ward—David Ferguson524	226
4th Ward-Mrs. S. C. O. Parsons 578 84	Irene A. Gross298	
H. J. A. Leteker 494	Samuel A. Baugh135	
Marcus A. Markham417	13th Ward—Thos, Berry	60
5th Ward-Wm. G. Springer770 388	Geo. F. Zender251	
Ernst M. Burghardt 362	14th Ward—Benj. R. Hoyt271	35
6th Ward-Thos. F. Halloran775 107	Gustav A Berg236	
John C. Goodrich668	Mary E. Bush 88	
Thomas Dunn187	15th Ward-Wm. Adair	217
7th Ward-John B. Todenbier546 283	Margaret M. Mathews 1	
Frank Hangel263	16th Ward—Jas. F. Ratigan315	55
8th Ward-Thos. F. Comerford549 69	Lucien E. Ellis260	
Geo. A. Orleman 480	Edith M. Croft 47	
Mary A. Willard178		
	·	

#### NOVEMBER ELECTION.—CITY OFFICERS.

	MAYOR.		MAYOR.		MAYOR. CLERK.		ATTO	ATTORNEY.		TREAS.		ASSO. RECORDER		POLICE.		JUSTICE OF PEACE.	
	Pingree, R.	Pridgeon, D.	Kronberg, D.	Schmid, R.	Casgrain, D.	Rasch, R.	Tuite, R.	Lennane, D.	Chambers, R.	Wilkins, D.	Sheahan, D.	Wiest, R.	Phelan, D.	Lemkie, R.			
ist Ward	1310	706	925	1096	815	1203	1307	705	1305	718	918	1098	761	1238			
2d Ward	1293	529	710	1112	651	1166	1269	546	1223	601	671	1145	618	1198			
3d Ward	978	678	857	801	842	809	917	739	881	773	913	742	798	853			
4th Ward	1101	638	831	893	767	958	1085	644	1069	669	869	863	733	989			
5th Ward	899	1099	1283	715	1170	815	851	1145	787	1210	1300	696	1180	812			
6th Ward 7th Ward	1070 986	965 865	1178 1080	856 592	114S 1059	883 611	870 789	1152 888	1012	1025	1212	821 579	1120	910 642			
8th Ward	895	901	1080	710	967	826	871	918	859	1045	1054	736	1021	696			
9th Ward	1015	1119	1226	906	1173	960	1049		941	1190	1241	890	1174	957			
10th Ward	1085	962	1166	885	981	1052	1168	876	1058	976	1046	986	1049	1087			
11th Ward	809	761	751	821	714	859	901	633	857	712	774	801	725	847			
12th Ward	834	605	783	643	699	728	766	651	734	691	738	692	688	733			
13th Ward	576	445	491	533	469	551	614	402	538	474	507	512	482	536			
14th Ward	534	443	565	425	523	469	505	480	488	504	515	469	511	479			
15th Ward	355	439	536	248	455	326	336	446	249	544	546	246	565	224			
16th Ward	414	421	459	394	454		386		386	467	455	398	479	374			
Totals Majorities.		11616	13919	11640		12614	13592 1834	11758	13013 470	12548	13849		13011	12475			

Rev. C. E. Conley, Prohibition candidate for Mayor, received 69 votes.

BOARD OF ESTIMATES.

At Large.—Louis P. Campau, D., 12,862;
Orren Scotten, R., 12.823; John N. Bagley,
R., 12,807; James L. Edson, R., 12,802; Anthony Petz, D., 12,798; George Moebs, sr. R.,
12,740; John Shook, D., 12,736; John Japes,
D., 12,724; Patrick H. Dee, D., 12,694; Ernest
M. Burghardt, R., 12,588. Campau over
Moebs, 122; Scotten over Shook, 87; Bagley
over Japes, 83; Edson over Dee, 118; Petz
over Burghardt, 210.

First Ward, Farrand, R., 579 mai. Second. BOARD OF ESTIMATES.

over Burchardt, 210.

First Ward, Farrand, R., 579 maj. Second, Wright, R., 642 maj. Third, Popeshill, D., 18 maj. Fourth, Seeley, R., 289 maj. Fifth, Gorenflo, D., 557 maj. Sixth, Hickey, D., 54 maj. Seventh, Bayer, D., 338 maj. Eighth, Cornell, R., 2 maj. Ninth, Murtagh, D., 400 maj. Tenth, Appelt, R., 209 maj. Eleventh, Sauer, R., 149 maj. Twelfth, Hoffman, R., 74 maj. Thirteenth, Stenius, R., 69 maj. Fourthth, Nelson, R., 18 maj. Fift'th, De Vogslaer, D., 343 maj. Sixteenth, Hargreaves, D., 78. Summary: At Larre, Republicans, 3, Ibemocrats, 2; from the Wards, Rep. 9, Dem. 7.

#### ALDERMEN.

First Ward—Coots, R., 1408; Jackson, D., 579; maj., 829.

Second Ward-Gilmore, R., 1237; Marsh, D., 549; maj., 688. Third Ward—Reves, R., 1078; Wettlaufer,

D., 587; maj., 491.
Fourth Ward—Griggs, R., 1081: Grogan, D.,

649; maj., 482. Fifth Ward—Karrer, D., 1209; Ernest, R.,

786; maj., 423. Sixth Ward.—Barnes, R., 1227; Shanahan, D., 700; maj., 527. Seventh Ward.—Roth, D., 878; Noah, R.,

787; maj., 91. Eighth Ward—Watson, R., 862; Kellogg, D.,

680; maj., 182.
Ninth Ward—Reschke, R., 1052; Hemel, D., 789; Beaubien, Ind., 259; maj., 263.
Tenth Ward—Buhrer, R., 1043; Hayes, D.,

994; maj , 49 Eleventh Ward—Richert, R., 861; McGuire,

D., 706; maj., 155. Twelfth Ward—Brennan, Ind. D., 562; Tier-

nev. D., 471; Addison, R., 444; maj., 91. Thirteenth Ward-O'Regan, D., 546; Brandon, R., 486; maj, 60.
Fourteenth Ward—Uthes, D., 439; Judd, R., 877; Schwab, Ind. D., 158; maj, 62.
Fifteenth Ward—Scott, Ind. D., 537; Ken-

nary, D., 243; maj., 294.

Sixteenth Ward-Amos, D., 475; Greusel, R., 898; maj., 87.

Summary—Rep., 9; Dem., 5; Ind. Dem., 2.

CONSTABLES

First Ward, Jamieson, R., 418 maj. 2d, Wilcoxson, R., 1228. 3d, Weitz, D., 157. 4th, Sparling, R., 336. 5th, Gnau, D., 560. 6th, Willard, R., 2. 7th, Finnucan, D., 1048. 8th, Fox. R., 71. 9th, Bowen, D., 357. 10th, Jahn, R., 83

11th, Mass, R., 1560. 12th, Lessnau, D., 11. 13th, Doberty, R., 170. 14th, Favor, D., 104. 15th, Corby, D., 370. 16th, Kleinow, D., 152. Summary—Rep., 8; Dem., 8.

ELECTION INSPECTORS.

Democrats, 155; Republicans, 150.

PARK BONDS. For, 7572; against, 2492; maj., 5080.

#### Points of Interest in and about Detroit.

HISTORIC.

Sites—Fort Pontchartrain, Cadillac's foun-dation of Detroit, below Jefferson av., near Michigat Exchange, about the corner of Woodbruge and Wayne. "Pontiac Gate" at First National Bank, Jefferson and Griswold. First National Bank, Jefferson and Griswold. Fort Shelby, about corner of Fort st. west and Shelby. Fort Croghan or "Nonsense," Park and High. Campau house, 140 Jefferson av. Cadillac or old Cass house, 164 Larned. Hamtramck house, corner Wesson place, East Detroit, a well-kept example of the old French dwelling, which Col. Hamtramck owned and in which he died, April 11, 1803. Bloody Run and remnant of Pontiac tree, Jefferson av. just beyond Addit at

Jefferson av., just beyond Adair st.
High School building, formerly Territorial
and then State Capitol, Griswold and State.

Grant house, formerly occupied by Gen. (then Lieut.) U. S. Grant, 253 Fort st. east.

#### MONUMENTAL

Cannon, from Perry's victory, Woodward av., front of City Hall.
Soldiers' and Sailors' Monument, Campus

Martius.

Bagley Fountain and Bust, Campus Martius. Cadillac, Marquette, Lasalle, and Richard statues, on the City Hall.

Elmwood Cemetery, east end (Chandler and other monuments); Mt. Elliott, adjoining (Catholic, Hamtramck buried here); Jewish, also near; Woodmere, west end (also crematorium).

PUBLIC BUILDINGS, WORKS, AND PARKS.

Belle Isle Park, head of Detroit river. Grand Circus, four squares above Campus Martius. Cass Park, Second av., between Ledyard and Bagg. Boulevards, north and east sides.

Water-works, East Detroit.

Rolice headquarters, Randolph st. Fire headquarters, Larned and Wayne (self-propeller at engine-house head of Griswold.)

Post-office, custom-house and U. S. court, Griswold and Larned. Site of new Govern-ment building, Fort st. west, Lafayette av., Shelby, and Wayne.

County Jail, Clinton and Beaubien. City Hall and Tower, Campus Martius. Market buildings, Cadillac Square.

IBRARIES, BOOKS, AND ART.

Public Library and Scientific Museum, Gratiot, near Woodward. Museum open 2 to 5 P. M. Bar Library, Sietz Block, near Post-office.

Art Museum, Jefferson and Hastings Cyclorama (battle scenes), Bates and Larn'd Art stores, Woodward above Campus and

Grand Circus.

Book-stores, Woodward, Larned to John R. Second-hand book-stores, Grand River, near Woodward, and 85 Michigan av

Calvert lithographing establishment, Larned and Shelby.

Detroit Opera-house, Campus Martius. Whitney's Opera-house, Griswold, above Michigan av.

Miner's Opera-house, Randolph, nr. Monroe. Wonderland (dime museum), 78 Woodward.

COMMERCIAL.

Board of Trade and building, also U. S. Signal Service, Jefferson and Griswold. Hammond Building (ten stories), Griswo

and Fort st. west. Union Grain Elevator (1,300,000 bushels capacity), Union Depot, Twelfth st.
Cleveland steamers, foot of Wayne.

Port Huron sceamers, foot of Griswold or

Shelby Ferries, foot of Woodward or Joseph

Campau. Railway ferries, Central, Milwaukee, and

Union depots. Central depot, foot of Third st.

FACTORIES, ETC.
Michigan Stove Works, Jefferson and Adair. Peninsular Stove Works, Fort W., 8th to 10th. Detroit Stove Works, 1820-60 Jefferson. Michigan Car Works, West Detroit.

Peninsular Car Works, Riopelle and D.,G. H. & M. R. R

Pullman Palace-car Works, Croghan and St.

Aubin av. Bridge and Iron Works, Foundry St. and M.

C. R. R. Brush Electric-light Works, Foundry St. and

M. C. R. R.
Edison Electric-light Works, State and Washington

Detroit Electrical Works, Woodbridge and Seventh.

Ferry Seed Store, near Miner's Opera-house. Seed farm and garden, Grand River ave., near city. Test gardens, Ferry av., near Woodward.

MISCELLANEOUS.

Y. M. C. A. Building, Grand River and Griswold.

Casino Tabernacle, Griswold, opposite High School

THE DETROIT JOURNAL office, 40 Congress W. Western Union Telegraph, Griswold and Congress W.

Telephone central office, 68 Griswold. Recreation Park, Brady, between Beaubien and Brush.

Athletic Club grounds, 833-65 Woodward. Detroit Skating Rink, Larned and Randolph; the Princess, Second, near Grand River.

Michigan (Republican) Club-house, 92 Fort

Light Infantry Armory, Congress east, near Woodward.

Light Guard Armory, formerly Fireman's Hall, Jefferson and Randolph.

Boat-houses, foot of Joseph Campau.

SUBURBAN. Canadian suburbs, particularly Windsor and Sandwich. Inquire for Gen. Hull's head-

quarters in war of 1812, etc.
Fort Wayne, just below city.
Glass Works, Delray, below city.

Grosse Pointe, above city.
Electric railways, east and west ends, and north end Woodward av.

#### Detroit Public and Other Charities. Association of Charities, 10 Merrill Block.

THE CHARITIES PARTICIPATING in the Floral and Musical Charity Festival,

April 22-5, 1890. Bethel Home, Griswold and Atwater. Casino Tabernacle, Griswold, opposite High

School.

Children's Free Hospital.
Day Nursery and Kindergarten, 55 Church.
Grace Hospital (homœopathic) Willis av. and John R.

Hebrew Widows' and Orphans' Association.

Helping Hand Society. Home for Boys, 311 Cass av. Home of the Friendless, Warren av., near Woodward.

Home of Industry (for discharged convicts), 641 Reaubien.

House of the Good Shepherd, 792 Fort st.

Industrial School, Grand River and Washington.

open Door (for fallen women), 223 Park.
Protestant Orphan Asylum, 988 Jefferson.
St. Luke s Hospital, Church Home, and Orphanage, McKinstry av. and Fort st. west. St. Vincent's Female Orphan Asylum,

McDougall av., near Larned.
Thompson Home for Old Ladies, Hancock

and Cass.

Woman's Christian Association, 33 Center. Woman's Hospital and Foundlings' Home, Thirteenth, near Linden.

Woman's Relief Corps.

Young Woman's Home, 74 Adams av. west. Zoar Orphan Asylum and Home for the Aged, end of Harvey av., Springwells.

#### OTHER CHARITIES.

Contagious Disease Hospital, Crawford

Road, near city limits.
Detroit Sanitarium, 250 Fort st. west.
Emergency Hospital and Free Dispensary,
Michigan av. and Second.

Free Eye and Ear Clinic, Room 8, Market Building.

Harper Hospital, head of Martin Place, near Woodward. Home for the Aged Poor, Dequindre and

Scott. House of Providence, Infant Asylum, and Lying-in Hospital, St. Antoine and Elizabeth. Lutheran Deaf and Dumb Asylum, Norris,

near city. St. Anthony's Male Orphan Asylum, Gra-

tiot av., near city. St. Joseph's Retreat for the Insane, Dearborn. St. Mary's Free Eye and Ear Infirmary,

St. Mary's Hospital, St. Antoine, nr Gratiot. United States Marine Hospital. Jefferson

onled States marine Hospital, Jenerson and Mt. Elliott.
Willow Lawn, private hospital for women, 626 Fort st. west.

#### The Public Service.

Besides the board of officers before mentioned, the Police Department and Force of Detroit includes 24 roundsmen, 253 patrolmen, 15 doormen, 3 signal operators, 3 signal timekeepers, 1 assistant clerk, 1 Harbor-master's box 2 hostlers and 1 insultar Two of ter's boy, 2 hostlers, and 1 janitor. Two of the roundsmen who serve as detectives re-ceive each \$1000 a year; the other roundsmen \$900. Six patrolmen acting as detectives and swu. Six patroimen acting as detectives and one as Harbor-master receive salaries of \$1000; one as city sealer, \$960; and six as precinct officers, \$900. The remaining patrolmen receive each \$800; the doormen, \$600; signal men, \$480 and \$360; boys, \$360 and \$300; hostlers, \$600; and janitor, \$540. The regular station-houses are: The Central Police Station in the headquarters building at the intersection of Randolub. Bates, and Karmer uon in the neadquarters building at the inter-section of Randolph, Batrs, and Farmer streets; Woodbridge-street Station, on Wood-bridge street, east of Woodward avenue; the Eastern Police Station, corner of Russell st, and Gratiot av.; Elmwood-avenue Station, between Lafayette and Croghan streets; Trumof Trumbull bull-avenue Station, corner and Michigan avenues; Twentieth-street Station, between M. C. R. R. and Michigan avenue; Fremont street Station, on Fremont near Woodward avenue; Twenty-fourth-street Station, on Woodbridge street, east of Twentyfourth street; Grand River avenue and Twelfth street; Chene-street Station, on Fremont street, near Chene street.

#### FIRE DEPARTMENT.

The Detroit Fire Department comprises, besides the officers before named, a paid force of 236 men. in charge of 15 steam and 4 chemical fire-ngines, 6 hook and-ladder apparatus, and 8 supply wagons. There are kept in reserve, without companies, 1 first-class and 1 second-class steam fire-engine, 2 hose-carts, one 1-horse-wagon with hose, 1 hook-and-ladder apparatus, and 1 fire-escape. The fire-alarm telegraph has 262 miles of wire and 186 alarm-boxes. The street-hydrants number 1281, and the reservoirs 300.

#### WATER-WORKS.

The water service of the city has a total pipeage, including the two large mains, of 344 miles. It maintains 1800 fire-hydrants and 400 cisterns for use in case of fire. The pumpingcisterias for use in case of the. The pumping-works are on the Detroit river above the city, four miles from the City Hall, and contain three engines, with an aggregate daily capac-ity of 78,000,000 gallons, and eight boilers. The aggregate pumping in 1889 was 12,592, 283,559 gallons, a daily average of 34,498,998 gallons. Estimated value of the works Jan. 1 1888 24,001453. gallons. Estima: 1, 1888, \$4,091,453.

THE PUBLIC LIBRARY occupies one of the finest and most convenient occupies one of the inest and most convenient buildings in the country, built expressly for library purposes, and opened to the public Jan. 22, 1877. With a large extension in 1885, for reading-room, must um, and offices, its total cost is about \$10,000. The Library now total cost is about \$10,000. The Library now-numbers about \$0,000 bound volumes and over 10,000 pamphlets. It is open from 9 A. M. to 9 P. M. daily, except Sundays and holidays, and is free to everybody. Any resident of Detroit above 14 years of age, upon signing an agreement to observe the rules of the Library and furnishing a surety, may have a card upon which books may be drawn out for home reading, and any person, citizen or stranger, who wishes for a book to read in the building. is supplied with it. The reading-room is open daily from 9 A. M. to 9 P. M., except on Sundays and holidays, when it is open from 2 to 9 P. M., and free to all. There are on file 32 daily newspapers of the chief cities of this country, and upwards of 200 journals, and magazines, which embrace the leading religious, scientific, art, and literary publications of the world, in the English, French, and German languages.

There is also a scientific museum in the building, which is open free to the public every day (Sundays included) from 2 to 5 P. M.

THE PUBLIC SCHOOLS occupy high-school and 50 other buildings

(several of them leased), with from 1 to 25 rooms, and 39 to 1314 sittings, each. Total number of sittings, 19,971. Total value of property, about \$1,500,000. Number of teachers employed, 438.

Detroit City Railway, Etc.

Woodward av. line, 8 miles, from the river up Woodward av. to the steam railway cross-

ing.

Jefferson av. line, 5 miles, from the Central depot on Jefferson av. to Cadillac Boulevard. Gratiot av. line, 2½ miles, from the foot of Woodward av. up that thoroughfare to Mon-

woodward av. up that theroughtare to Mon-roe av., up Monroe av. to Randolph st., up Randolph st. to Gratiot av., and up Gratiot av. to the city limits. Michigan av. line, 3 miles, from the foot of Woodward av., up that thoroughfare to tich-igan av., up Michigan av. to the Grand Trunk

railroad track.

Brush and Russell st. line, 3 miles, from the foot of Woodward av., up that thoroughfare to Monroe av., up Monroe av. to Randolph st., up Randolph st. to Brush st., up Brush st. to Ohio st., along Ohio st. to St. Antoine st., up St. Antoine st. to Farnsworth st., along Farns-worth st. to Russell st., up Russell st. to the Lake Shore and Michigan Southern; also, leaving Russell st. at Ferry av., and along that thoroughfare to the Grand Trunk cross-

Trumbull av. line, 4 miles, from the intersection of Atwater and Randolph sts., up Randolph to Congress, along Congress to Seventh, up Seventh to Howard, along Howard to Trumbull av., up Trumbull av. to the railroad

Congress and Baker st. line, 234 miles, from the intersection of Atwater and Randolph sts., up Randolph to Congress, along Congress to Seventh, up Seventh to Baker, and down Baker to Twenty fourth st.

Chene st. line, 4 miles, from the foot of Joseph Campau av., north on that thoroughfare to Atwater st., west on Atwater st. to Chene st., and north on Chene st., to the city limits.

Cass av. and Third st. line, 4 miles, from the Central depot, foot of Third st to Larned st., up Larned to Griswold st., up Griswold to State st., down State st. to Cass st., up Cass to Ledyard st., down Ledyard to Third av., up Third av. to Holden av., and up Holden av. to

the railroad crossing.

East Fortst. line (loop), 5 miles, from inter-section of Woodward and Congress st., east on Congress to Mt. Elliott, south on Mt. El-liott to Jefferson, east on Jefferson to Belle Isle bridge. Returning west on Jefferson to Mt. Elliott, north on Mt. Elliott to Fort st., west on Fort st. east to Brush, south on Brush to Congress, and west on Congress to Wood-

Mack st. line, 1½ miles (operated by East Detroit and Grosse Pointe Electric Railway), from the intersection of Mack and Gratiot

aves., east along Mack av. to city limits, where it connects with the electric railway. Fort Wayne & Elmwood line, 10 miles from the eastern city limits down Champlain st. to Elmwood av., to Croghan st., to Randolph st., Elimwood av., to Croghan st., to Randoiph st., to Cadillac Square, to Woodward av., thence down West Fort st. to Clark av., to River road, to Fort Wayne, and the village of Delray. From the corner of Clark av. and Fort st., down Fort st. to Woodmere cemetery. From Woodmere cemetery west on Fort st to Dearborn road, and south on Dearborn road to village of Delray. to village of Delray.

Grand River av. line, 31/2 miles, from the intersection of Woodward and Jefferson avs.,

up Woodward av. to Grand River to city limits. Myrtle st. line, 116 miles, from Grand River av., on Myrtle st. to Twenty-fourth st

Crawford st. line, 1½ miles, from Grand River north on Crawford to railroad crossing. Third st line, ¾ miles, from Grand River, south on Third st. to Larned st.

East Congress st. line (operated by Detroit City Railway), from intersection of Woodward av and Congress st., east on Congress to Mt. Edliott, south on Mt. Edliott to Jefferson, and east on Jefferson to Belle Isle bridge.

Detroit Electric railway, 2 miles, from Twenty-fourth st., on the Dix road, into

Springwells.

Highland Park line, electric, 3½ miles, from railway crossing on Woodward av. out that thoroughfare to Highland Park.

East Detroit and Grosse Pointe railway, electric, 7 miles, from the intersection of city limits and Mack av., east on Mack av., to St. Clair boulevard, and south on St. Clair boulevard to Jefferson ave.

Belle Isle Park, the only public breathing-place of size yet owned by the city of Detroit, is on an island, as the name implies, the up-permost of the fine series of islets in the Detroit River, and the one nearest its beginning at Lake St. Clair The size of this tract is 670 acres, though commonly stated at a round 700. This beautiful and fertile spot has been variously known in history as Hog and Rattle-snake Island, and by other names, and is said to have received its present name about forty years ago, in honor of Miss Belle Cass, daughter of Gr. Lewis Cass. Its general elevation above the mean level of the river is seven feet, and it is finely shared by natural growths of hickory, elm, oak, and other forest trees. It was bought by the city, a few years ago, for \$200,000, and a large sum has since been expended upon it under the direction of the Park Commission.

Musical Societies in Detroit: Concordia Society (German). Detroit Musicale. Har-monie Society (German). Lyra Singing Soci-ety (German). Musical Protection Union. Philharmonic Club. Teutonia Singing Society (German). Veteran Musical Society (German). Zither Club (German).

THE heaviest metal known is iridium, with a specific gravity of 23—that is, it is 23 times heavier than an equal bulk of water. Then come rolled platinum, at 22.069; hammered gold, 19.361; uranium, 18.23, and tungsten, 17.

A cubic inch of water makes a cubic foot (1728 inches) of steam. If this be compressed to three cubic inches, it exerts a pressure of 3840 pounds to the square inch, or the pressure of nearly 257 atmospheres.

THE present area of the city is 22 square miles. It has 7401/4 acres of, public parks, 1211/4 miles of paved streets, 108 miles of public sewers, and 162 of lateral sewers.

THE Soldiers' Monument was designed by the celebrated sculvtor, Randolph Rogers, and erected in 1871-'72 at a cost of \$60,000.

### Record of the Pear.

#### Miscellaneous Events.

**DECEMBER** (1888). 1.—Third great fire in Calumet and Hecla mine, U. P.—Diaz third time inaugurated President of Mexico.

2.—Second session Fiftieth Congress; Pres Lent. Cleveland's last annual message. ident Cleveland's last annual message.— Warren avenue Baptist chapel, Detroit, dedicated.-Troops kill 137 persons during riot at La Peza, Peru.

3.—Cuinese faction fight at Street's City, Oregon; 5 killed, 3 wounded. 5.—Railway collision near Detroit; 10 hurt, 5 farally.—Successful experiments on animals at Edison's laboratory, Orange, N. J., testing power of electricity to execute criminals.

6.—Six suicides in New York City.—Miners'

outbreak at Bevier, Mo.: 1 killed.
7.—Earthquake in Province of Quebec.—
Transfer steamer Maryland burned at Port

Morris, N. Y., with cars on board.

8.—Birmipham, Ala, jail attacked by mob to get prisoner for lynching; 9 killed and 30 wounded by guards.—New iron bridge at Bridgeport, Ct., tested by 12 of Barnum's largest elephants.—Spanish Liberal Cabinet

resigned.

10.—Attempt to destroy Chicago distillery by dynamite.—New Spanish Cabinet an-

nounced.

11.—Supposed dust explosion Chicago oatmeal mill; 3 killed, several injured; loss \$150,000.—Coal-breakers burned at Pleasant Val-

ley, Pa.; \$100,000 loss.
12.—U. S. steamers Galena and Yantic sail for Hayti, to demand of the Legitime Government the surrender of the American teamer

Haytien Republic, which had been seized.— Chicago Opera-house damaged \$50,000 by fire. 14.—Refuges from yellow fever begin to return to Jacksonville, Fla.—Woolen factory burned at Neumunster, Germany; 15 persons

15.—Part of a business block consumed in St. Louis, Mo.; damage, \$250,000.
16.—Casino Tabernacle dedicated, Detroit. Express car on Illinois Central train robbed of \$3000 by masked men near Duck Hill, Mo.; 1 passenger killed.-Légitime elected Presi-

dent of Hayti.

17.—Whittier 81 years old.—Great storms in Eastern States —Fight between whites and negroes at Wahalak, Miss.; several killed on each side.—German troops attacked by natives at Samoa, and 18 killed.

19.—Bridge over the Merrimack, in Neampshipe, carried over a fall: three men

Hampshire, carried over a fall; three men

lost.—Three earthquake shocks in Catskill re-gion, N. Y.

20.—Missouri Supreme Court decides that nunicipalities cannot by local ordinance fix telephone charges.—British and Egyptian troops drive the Arabs from in front of Suakim, killing about 400.—Steamer Haytien

Republic surrendered to Admiral Luce. 21.—News received at Zanzibar that Stanley and Emin Bey had arrived on the Aruwimi.—Cincinnati fire kills a fireman and injures five others.—Part of the crew of the schooner Curtis Ackerly arrive in New York. and report its wreck after a month's drifting

and report its wreck after a month surfulny in storms.—Congress adjourns to Jan. 2.—Earthquake at Leroy, N. Y. 23.—Steamer Kate Adams burned on the lower Mississippi; over 25 lost.
24.—Steamer John H. Hanna burned near Plaquemine, La.; 30 lost.—Secretary of the Navy notified by Admiral Luce that the Hay-

tien Republic had been surrendered by the

Legitime faction. 25.—First German Baptist church dedi-cated, Detroit.—Million-dollar fire in Marble-head, Mass., and one of \$300,000 loss in Cin-

cinnati.

26.—General Logan's body removed to Soldiers' Home Cemetery.—American Historical Association meets in Washington.

27.—Seal of late Confederacy turned over to South Carolina.—Auburn, Dakota, burned.

28. Shell burst in powder-magazine at Messina, Sicily, killing 16.

29. Severe earthquake shocks in Nicaraqua; many killed and injured; also shocks in Hampshire, Eng.—Business part of Deloraine, Mass., burned; \$70,000 loss.—Explosion of powder-magazine, Messina, Sicily; \$22 killed. powder-magazine, M. ssina, Sicily; 22 killed.— Gladstone 79 years old.

#### January (1889.)

1.—Richardson Drug Co., St. Louis, burned out; \$1,000,000 loss.—Earthquakes in Saxony.

out; \$1,000,000 loss.—Earthquakes in Saxony.

2.—Steamer Natchez sunk near Lake Providence, La.; \$200,000 loss.—Silk syndicate formed in London and Lyons.

3.—Earthquake shocks in Pennsylvania.

4.—Nicaragua Canal bill passed the House.

—McMillan of Michigan, Frys of Maine, Hoar of Mass., Wolcott of Colo., Cullom of Ill., Manderson of Neb., and Higgins of Del., elected U. S. Senators.—Explosion of fire-damp in colliery at Oviedo, Spain; 27 killed.

9.—Great storm in Middle States and Criada; 40 killed, and suspension bridge near st

ada; 40 killed, and suspension bridge near st

Niagara Falls carried away.

10.—Connecticut Legislature elected N. G. Bulkley, Rep., Governor.—Earthquake shocks in Illinois.

14.—Electoral College casts 233 votes for Harrison and Morton, 168 for Cleveland and Thurman.—N.Y., P. & O. railroad accident at Talmadge, O.; 8 killed, 12 wounded.—Prussian

Landtag opened.

15.—Special message to Congress concerning Samoan affairs.—Earthquake shocks in Colorado.—Steamer P. Wyapeket sunk by

collision on East Indian coast; 42 lost.

16.—Earthquake at San Jose, Mexico; about \$5,000,000 damage.

18.—Colliery explosion at Hyde, near Man-

chester, Eng.; 39 killed.—Slight earthquakes in Scotland. 19.—News of massacre of four German mis-

sionaries and capture of three other mission-

sionaries and capture of three other missonaries by Arabs.

20.—Railroad bridge went down at Spottsville, Ky.; 10 killed.

21.—Grand Opera-house burned at St.
Paul, Minn.; loss, \$200.000.

22.—Plumb of Kansas, Dolph of Oregon, McPherson of New Jersey, and Coke of Texas, cleated If S. Sanators.

MOPHERSON OF New Jersey, and CORDOT 12AAN, elected U. S. Senators.

23.—Substitute for Mills tariff bill passed the Senate by 32 to 30, strict party vote.—Ransom of N. C. and Washburn of Minn. elected Senators.—\$100,000 fire in New York

City. 25.—Murder of Mrs. Latimer, at Jackson,

by her son, Irving Latimer, now serving in State Prison at same place. 26.—Insane asylum burned at London, Ont.—News of murder of English missionary

27.—Election in Paris; Boulanger majority, 54,432.

28.—Snow at Pensacola, Fla., for the second

time in a quarter-century. 29.—Berry of Arkansas elected U. S. Senator.

#### FEBRUARY.

1.—British extradition treaty rejected by the Senate; committee on foreign affairs instructed to investigate Samoan affairs.— Oklahoma bill passes the House.

2.—Naval appropriation bill, with \$100,000 for coaling station at Pago Pago, Samoa,

passes the House.

3.—Close of Crossley and Hunt revival at Central M. E. church, Detroit.—Train wrecked

by collapse of bridge near Groenendael, Bel-gium; 14 killed. 4.—Wall blown down at Omaha; 7 killed and 7 badly hurt.—British bark Largo Bay and 7 badly hurt.—British bark Largo Bay collided with and sank the Glencoe off Beachy Head; 54 lost.—Steamer Nereid and ship Kil-lochen collided in British channel; 24 lost. 6.—Nicaragua ship-canal bill passed the House by 1.8 to 60.—News of great fires in Mandalay, Burma; over 1000 houses burned. 7.—Northern Ohio blanket mills, Cleveland, burned; loss \$1(4000)

burned; loss, \$10,000.

8.—Legislative and pension appropriation bills passed the Senate, the army appropriations the House.—Heavy gales on the English

and It ish coasts.

9.—Fortification bill passes the Senate.
11.—Senate vote \$250,000 to protect American citizens on the Isthmus of Panama.—The President approves the act for a Department of Agriculture, and nominates Norman J. Coleman of Missouri Secretary of it.—Jap-anese constitution proclaimed by the Mikado.

13.—Electoral vote counted by Congress. 14.—French Government crisis; Cabinet

resigns. 18.—

18.—Cass statue presented to Congress as the gift of Michigan.—Central Park Hotel, Hartford, Ct., wrecked by boiler explosion; 28 lost.

19.—Cyclone in Georgia and Alabama; 20 killed.—Fire in Philadelphia; insurance loss, \$235,000

20.—Conference report on Direct Tax bill passes both Houses of Congress.
21.—New French Cabinet; Tirard, Premier.
22.—The President approves the act for the admission as States of North and South Dakota, Montana, and Washington.—Crane printing-house, Topeka, burned; \$400.000.

23.—Agricultural appropriation bill passes Senate.—Train robbery at Pixley, Cal.; \$60,000

taken.

24.—Close of Crossley and Hunt revival at Tabernacle M. E. church, Detroit; about 600 conversions claimed from all their work here.

26.—Army appropriation bill passes Sen-ate.—Chinese emperor marries three wives.— News of great flood and famine in Yellow River valley, China.

27.—Grand Trunk train goes through bridge at St. George, Ont.; 10 lost.—Gale on North Sea; 70 lost.

28.—Post-office appropriations pass Senate, and Indian appropriations the House.—Italian Prime Minister Crispi resigns.

#### MARCH.

3.-President vetoes the Direct Tax bill.

4.—President Harrison inaugurated.

The Cabinet nominated and confirmed. 6.—King Milan of Servia abdicates in favor of his minor son, Alexander I.
7.—New Servian Cabinet.—Crispi refuses to

form Italian Cabinet.

9.—News of wreck of Spanish steamer Remus off the Philippine islands; 42 lost.

10.—Battle of Abyssinian forces with der-

vishes at 'Netermineh. King John and his general killed.

11.—Thomas W. Palmer nominated Minis-

Brynmally colliery.

ter to Spain.

13.—Explosion at B.
Wrexham, Eng.; 20 killed.

15.—Colliery explosion explosion Nismes. near

France; 15 lost.—Fire in Anaconda smelling works, Montana; loss, \$1,000,000. 16 and 17.—Terrific hurricane at Samoan islands; American men of war Trenton, Vandalia, and Nipsic, and German war steamers Adler, Olga, and Eber wrecked, with 146 lives lost

20.—French torpedo-boat foundered off

Cherbourg; 15 lost. 22.—Excursion steamer Ocotlan foundered

22.—EXCUTSION SECRIFIC YOUNG TO LAKE Chapala, Mexico; over 50 lost.
26.—William III., King of Holland, announced by his Cabinet incapable of government, and a provisional regency appointed.—Spanish mail steamer Mindanao sunk by collision of the Chapaca. 40 lost lision with the Tisayas; 80 lost.

27.—President proclaims Oklahoma open

to settlement.

28.—Nomination of Murat Halstead as Minister to Germany rejected by Senate. 30.—Ostend packet Countess of Flanders sunk in the English Channel by Belgian mail

steamer Princess Henriette; 15 lost.

#### APRIL.

2.—Senate adjourned.—Flower show opened in Detroit

Prairie fire destroys Leola, Dakota. 4.—Rhode Island election; no choice of Governor.—French Chamber votes the prosecution of Boulanger.

5 - Detroit flower-show closes; attendance

about 85,000, receipts \$16,500.
6.—Cyclone in Virginia: great damage.—Fires at Pittsburgh, \$500,000 loss, and Savannah, \$750,000.

8.—Greater part of Seburned; over 10,000 lives lost Soochow, China,

Freight depot burned in Boston; \$500,-000 loss.

10.—Dixon of Rhode Island elected Sen-ator.—Gen. Von Verdy du Vernois appointed German Minister of War.—Coal-pit explosion at Castrop, New South Wales; 25 lost. 12.—Strike of street-car employees in St.

Paul and Minneapolis.

14.—Dedication of Second Presbyterian church, Detroit.

15.—News of yellow fever at Rio Janeiro; deaths about 100 a day.

16.—Installation of Rev. Marcus A. Brown-

son as pastor of First Presbyterian church, Detroit. 21.—Master Workman Powderly in Detroit;

addresses 2000 workingmen.

22.—Constitutional prohibition defeated in Massachusetts by 44,000 majority. 24.—Yellow fever at Sanford, Fla.

25.—Banquet to Minister Palmer, in Detroit -Wayne Co. S. S. Association meets in Northville.

28.—Grand Trunk express train derailed near Hamilton, Ont.; 19 killed.
29.—Samoan Congress meets in Berlin.

—Centennial celebration of Washington's first inauguration begins in New York City.—Carpet mill burned at Lowell, Mass.; \$200,000.

2.--Cyclone in eastern part of North Carolina.

3.-Kentucky Institute for the Minded burned at Frankfort; loss, \$75,000. 5.—Paris Exposition opened, celebrating French Revolution of 1789.

Sixteen ice-houses burned near Laporte,

Ind.; loss, \$63,000.
7.—Johns Hopkins Hospital opened at Baltimore, cost \$2,050,000.
9.—Colliery accident near Middleport, Pa.;

10.—Bellair Goblet Works burned at Find-

lay, O.; 115,000 loss.

13.—The King of Holland abdicates.

17.—House of Commons rejects a motion to abolish hereditary membership in House of Lords, by 201 to 160.—Steamer Alaska found-ered off Cape Blanco, Oregon Coast; over 30 lost.

18.—Fire at St. Sauveur, Quebec; \$600,000 loss

22.—News of flood in Bohemia; 45 drowned. Two French fishing sloops lost, with 175 lives.

28.—Great fire at Podhajee, Galicia; many lives lost.

29.-Great fire in Yokota, Japan;

houses burned and 10,000 people made homeless 30.-Monument unveiled on site of Anarch-

ist tragedy, Haymarket, Chicago.—Remarka-bly cold weather in Michigan, with snow in places.

31.—Bursting of dam near Johnstown, Pa., flooding Conemaugh valley and destroying several towns; 3500 lives lost, and \$8,665,000 in property.

JUNE.

1.—Great floods in Pennsylvania, New

York, and other States.

2.—Flood in Ping Yuen and Chan Pingres districts, China; over 6000 drowned.

3.—Revenue cutter Rush sailed from San Francisco, to protect seal fisheries in Behring

4.—Michigan Furniture Co.'s building near Oakland, Cal., burned; \$90,000 loss.

5.—News of hurricane in China, with 10,000

lives lost.—Five blocks burned in Jackson-ville, Fla.; loss, \$200,000.

6.—Terrific thunder-storm in London; much loss of life and property.—Great fire in Seattle, Wash; over 31 blocks burned, with \$6,000,000 loss and one life.

7.-Light earthquake shock at New Bedford, Mass.

-Fr. Kolasinski's new church dedicated in Detroit.

12.—Dedication of Michigan monuments on Gettysburg battlefield.—Accident to Sun-day-school excursion train; 76 killed.—News of Stanley's landing on the southeast shore of the Victoria Nyanza.—Fire in Grinnell, Io.; loss, \$100,000.—Cave-in at Wilkesbarre, Pa.; \$300,000 loss.

14.—Samoan treaty signed at Berlin by English, German, and United States Commis-

18.—Senator Chandler of New Hampshire elected.-Prohibition rejected in Pennsylvania

by 180,000 majority.

by 180,000 majority.

20.—Rhode Island prohibition amendment adopted in 1886 repealed by 18,596 majority.—
Le Vieux Chene, Paris. largest furniture store in Europe, burned; \$500,000 loss.—Disastrous fire in Boston, with loss of life.

21.—United Glass Co., Syracuse, N. Y., capital \$1,000,000, incorporated.

23.—Forty-fifth Michigan University commencement begins: nearly 500 in graduating

mencement begins; nearly 500 in graduating

24.—Great tumult in French Chamber of 24.—Great tunnut in French Chamber of Deputies, and some fighting.
26.—Three freight trains wrecked in collision at Latrobe, Pa.; 30 lives lost.
27.—Monument to Capt. John Mason, pioneer Indian fighter, unveiled at Mystic, Conn.

28.—Fire in Burton block, Chicago; loss, \$290,000.

Berlin had 38 suicides this month.

Jm.v.

1.—Free postal delivery begun at Ypsilanti. —Fire at Lunenberg, Germany; loss, \$3,000,000. 2.—Passenger train wrecked near Thaxton, Va.; 17 killed.—Idaho convention met, to take steps for Statchood.—Fire at Ellensburg, Washington; loss, \$2,000,000.—Also at Duran-go, Colo.; loss, \$300,000. 3.—Four business blocks burned at Halley,

Idaho; loss, \$500,000.—Explosion in fireworks factory, near Paris; 7 killed.—Fire-damp explosion in colliery at St. Etienne, France;

over 220 killed.

over 220 kined.

4.—Georgia's \$1,000,000 capital formally accepted by the State.—Replica of Bartholdi's statue of Liberty, presented by Americans, unveiled at Isle des Cygnes, France.

6.—Comet discovered by Astronomer

6.—Comet discovered by Astronomer Brooks, at Geneva, N. Y.
7.—Labor riot at Duluth; 3 killed.—Fire at Bakersfield, Cal.; 100s, \$1,000,000.
9.—Michigan Press Association opens

9.—Michigan Fress Association Openas session at Grand Rapids.—Railway collision near Cluinita, Bulgaria; 15 killed.—News of flood in river Indus; 40 drowned.—Cloud-burst near Amsterdam, N. Y.

15.—Closing session French Chamber of Deputies; extremely turbulent.—Princeton, near Cincinnati, destroyed by tornado.

16.—National Educational Association

meets in Nashville, Tenn.-Attempt on the life of Dom Pedro, Brazil, by a Portuguese Republican.—News of bursting of waterspout in China; 6000 lives lost. Brewery burned at Fort Wayne, Ind. Loss, \$350,000.

17.—Circus seats broke down with 800 peo-

17.—Circus seats of one injured.
ple at Milford, Mass.; many injured.
Completes burned at Wabash, Ind.

loss, \$100,000.-Fire at Constantinople; 200 houses burned.

19.—Cloud-burst in Kanawha valley, W.

19.—Clouded Va. 15 forowed.
21.—Steamer loaded with colored excursionists ran into closed drawbridge near injured.—Slight

sionists ran into closed draworldge near Savannah; many killed and injured.—Slight shocks of earthquake at Memphis.—Fire at Paks, Hungary; 400 houses burned.

23.—News of great fire at Lu Chow, China; 87,000 dwellings and 1200 lives lost, and 170,000 repuls homeless. Balgium greats 20,000 000. people homeless.—Belgium grants \$2,000,000

or Congo railway. 24.—Striking coal-miners starving at Braid-

wood, Ill.

28.—News of great floods in Hungary.—Great thunder-storm in Chicago; 8 killed, \$100,000 damage.—Destructive earthquake in China.

29.—News of cyclone in Hungary; loss of hundreds of lives.

30.—Very heavy rains in Colorado.—Insurrection in Honolulu, S. I., quelled by Government troops.

31.—News of destructive earthquakes in Japan.

AUGUST.

1.—Monument to Pilgrim Fathers dedicated at Plymouth, Mass.

2.—Explosion of giant powder at Republic iron mine, Upper Peninsula; 5 killed.—Every manufactory burned at Ripley, O.; loss, \$200,-000.

3.—Defeat of dervishes by Egyptian troops under Gen. Grenfell; 1500 dervishes killed and wounded.

5.—Great fire at Spokane Falls, Wash.; 40 blocks burnt; loss, \$14,000,000. 6.—Twelve thousand men reported idle in

Pennsylvania coke region.
7.—Fire at Fort Wayne, Ind.; loss, \$160,000.

10.—Corner-stone laid of new court-house at Howell.

11.—King Malietoa returns from exile to the Samoan Islands, and resumes power.

13.—Boulanger, Dillon, and Rochefort found guilty of conspiracy and attempt at treason by High Court of French Senate.

15.—Cloud-burst at Paterson, N. J.—Destructive prairie fires near Miles City, Montans

19.—Tremendous floods and land-slides in Kii province, Japan; 10,000 to 15,000 lost.— Steamer on trial trip explodes at Shanghai; **30** killed.

21.—Oil refinery burned at Allegheny City, Pa.; loss, \$200,000.—March of 100,000 striking dockmen through the streets of London.

23.—Part of Barnum's circus wrecked near Watertown, N. Y.; loss, \$20,000.—Gen. Hippo-lyte, Provisional President of Hayt, occupies Fort au Prince; insurrection at an end; Légi-time leaves for New York.—Five criminals executed at the Tombs prison, New York.

27.—National Editorial Association meets in Detroit.—National Encampment of the Grand Army of the Republic opens in Milwaukee.—Earthquake at Khenzorik, on Russian frontier; 129 buried alive.
28.—Gen. R. A. Alger, of Detroit, elected Commander-in-chief of the Grand Army of the Republic

the Republic. 29.—Corner-stone of new court-house laid

at Allegan. 30—General elections in Brazil; 95 Liberals and 30 Oppositionists returned to the House of Representatives.—British Parliament pro-

rogued. 31.—Gardiner, Montana, on the border of the National Park, destroyed by forest fires.

#### SEPTEMBER.

1.—Black Pine, Mont., burned by forest fires.—Assembly of 150,000 strikers in Hyde Park, London.

2.—Labor parades in Detroit and other American cities.—Congress of Orientalists opened in Stockholm.

3.—Convention met to frame State consti-tution for Wyoming.—Barker, Mont., mostly burned.—Old Yarmouth and Sandwich, Mass., celebrated 250th anniversary.-American Social Science Association met in Saratoga

4.—Largest bar of gold known cast at U. S. assay office, Helena. Mont., weighing 500 lbs. and worth over \$100,000.—South Lyndeboro,

and worth over \$100,000.—South Lyndeboro, N. H., celebrated 150th anniversary.

5.—Explosion at Mauricewood colliery, Penicuick, Scotland; 50 killed.—Log College celebration near Hartsville, Pa.; address by President Harrison.—Lumber fire at Winona, Minn.; loss, \$314,000.—Heavy frost in the Northwest.—Steamship Earnmoor foundered at sea: 28 lost

Antwern: 185 killed, 20 missing, 300 injured,

antwern: 185 killed, 20 missing, 300 injured, and \$7,000,000 property lost.
7.—Launch of the U. S. steel cruiser Philadelphia, at Philadelphia.—Mammoth sugarrefinery at Williamsburg, N. Y., burned; \$2,000,000 loss.

8.—Guilford and Madison, Conn., celebrated 250th anniversary.—Steam barge Philip D. Armour sunk on St. Clair flats by the steam barge Marion.—Destructive forest fires still in Montana.

10.—Grand jury meets in Detroit, to investigate boodlers and other wrong-doers.—Tre-mendous storm and high water on the Atlantic coast: many wrecks and great damage and loss of life.—Mine flooded at Golden, Colo.; 11 drowned.—Another murder by Jack the Rip-per in Whitechapel, London.—Twentieth an-

niversary Detroit Academy of Medicine. State Fair opened at Lansing.

11.—Resignation of "Corporal Tanner," Commissioner of Pensions.-Storms on the Atlantic continue, with immense loss of property and life.—Tidal wave at Hazugun and Aichigen, China; nearly 800 drowned, 200 houses washed away.—Stanley reported on conquering march toward Mombassa, estab conquering march oward mointeasts, essai liabing supremacy of the British East Africat Company between the Upper Nile and the east coast.—Bimetallic congress opens if Paris, and National Conference of Charities in San Francisco.—Cholera reported in Athem -Pennsylvania monuments dedicated at Ge tysburg.—Christian Alliance convention

Coldwater.
12.—Sir Edwin Arnold, the eminent author in Washington.—First snow of the season Hope, Dakota.—Wilton, N. H., celebrates 1506 anniversary.—U. S. flags provided for Detro

schools.
18.—Great London dock strike settled. Daily attendance at the Paris Exposition, 15000.—Wheatland, N. Y., celebrates centennianniversary.—Funeral of Hon. S. S. Cox.

15.—Exposition building burned at Si Joseph, Mo.; loss, \$259,000.—Dr. E. E. Fast, of Buchanan, cut his throat with a razor, prob ably under influence of opium.—Battle he tween blacks and whites at Lawrenceville, Ill. two negroes shot.—Great fire in Louisville; killed and \$1,250,000 loss.

16.—Resignations of nine members of the

16.—Resignations of nine members of the staff of Grace Hospital, Detroit, accepted.—Lewis A. Groff of Omaha appointed Commissioner of the General Land Office.—Nagla charged with the murder of Judge Terry, we leased.—Jackson killed in St. Louis prise fight by Ahearn.

17.—International Exposition opened by Gov. Luce in Detroit.—Meeting of Americal Association of Cemetery Superintendents, Detroit.—First crand in the area.

troit.—First grand jury arrest, Detroit.

18.—Reunion of the Army of the Cumber land in Chattanoga; grand parade of Federa and Confederate soldiers.—Dedication of the John Crouse Memorial College for Women Syracuse, N. Y.

19.—Suicide of Mr. and Mrs. Silas Dim more in Windsor.—Julius Goetsch killed at the Hammond Building, Detroit.—Rock-slid in Quebec; 45 killed, 14 wounded, \$100.00

damage done.

20.—Heavy gale on Lake Erie; thrilling passage of the City of Detroit, with 700 page passage of the City of Detroit, with 700 passagesrs.—British war-ship Lily wrecked of P. Annor, on the Atlantic coast; 7 lives lost. 22.—French legislative elections; Government majority; Boulanger triumph at Mormartre, Paris.—News of cholera in Mesopatamia, with 1285 deaths.

23.—Detroit Exposition attended by 37.004. Charte with thing house of Belford, Clarke.

23.—Detroit Exposition attended by 37.000—Great publishing house of Belford. Clarked Co., Chicago, fails; liabilities, \$400,000.—Find at Manistee, Mich.; 1,000,000 feet of lumber, etc., burned; loss, \$125,000.
24.—Meeting of Mexican war veterans in Charles Company of Charles Ch

Detroit.—Passenger car wrecked in Chicago suburbs; five killed, six badly injured.—Arrest of Ald. Lauder of Detroit, on presentment of

of Ald. Lauder of Detroit, on presentment of the grand jury.

25.—Reunion of the Army of the Tennessee, Cincinnati.—Two railway trains robbed in Ababama and Texas.—Chief of Police Borgman, Detroit, fined \$100 for contempt of court.—College of Medicine building opened, Detroit.

26.—Killing of Thomas Gray by Michael A. Barry, near Exposition grounds, Detroit.—Overflow of moliten metal at steel works, Braddock, Pa.; one killed, 7 badly burned.

27.—Westinghouse Electric Co.'s pins.

27.—Westinghouse Electric Co.'s plant

burned, Pittsburg; loss, \$100,000.—Close of the Detroit Exposition; a decided success. 28.—New York Central train telescoped near Palatine Bridge; W. H. Manning of Mar-

quette and 8 other persons killed, 10 injured.

30.—Fire in Butte City, Mont.; 8 firemen fatally, several slightly injured; loss, \$300.000.—Collision of express trains near Naples, Italy; about 60 killed and wounded.—Earl and Counters of Mosth's Detroit. Countess of Meath in Detroit.

#### OCTOBER.

1.—Fire in Grand Haven; Cutler House, three churches, and about 50 other buildings burned; loss, \$520,000.—Detroit Athletic Club gymnasium opened.—State constitutions adopted and State officers elected in North and South Dakota, Washington, and Mon-tana; Republican triumphs in the first three, the other divided.—Free postal delivery in lonia.

2.--News of 2050 deaths from cholera in Bagdad to Aug. 31.—Earthquake shocks in Mexico.—Suicide of Arthur S. Rickard in Grand Rapids after shooting his wife.—Second indictment for bribery against Ald.

Lauder, of Detroit.

3.—Steamer Corona exploded boilers near Port Hudson, Miss.; about 40 killed and many wounded.—Delegates to International American Congress begin tour of the United States.

can congress begin tour of the United States.

6.—Second ballots in French elections;
Boulangists generally defeated.—News of terrible hurricanes and much loss of life in Sardinia and other parts of Italy.—Gale on the upper lakes; great loss of life and property.—Dedication of Mt. Hope Congregational church, Detroit.
7.—Prohibition amendment defeated

Connecticut.—Fire in Pittsburg; loss, \$250,000.

—Corner-stone laid of First Presbyterian church, Detroit.—Ald. Tierney indicted by

grand jury.
8.—Great storm on the British and Irish

8.—Great storm on the British and Irish coasts, with immense loss.

9.—Fire in Savannah, Ga.; loss, \$400,000.—Clem Studebaker's dwelling burned in South Bend, Ind.; loss, \$250,000.—School-house of Michigan State Prison, Jackson, burned, with prison library, etc.; loss, \$35,000.

10.—Ellwood T. Hance appointed Postmaster of Detroit.—Opening at New London, Ct., of greatest double-track railway drawbridge in the world.

bridge in the world.

11.-Czar received in Berlin by Emperor William.

12.—Village of Serpent River, Ont., burned; loss. \$300,000. 13.—Talmage's Brooklyn Tabernacle burned; loss, \$150,000.—Accident to railway employees near Lansing; three killed.—Dedi-cation of Borgess (Catholic) Hospital, Kala-Brooklyn mazoo.

14—Terrible gale on the Massachusetts coast.—Riot in Dothen, Ala.; 2 killed, 6 wounded.

15 - Dreadful accident on Cincinnati street-

car inclined plane; 5 killed, including Mrs. Caleb Ives, formerly of Detroit.

16.—Explosion in the Bentilee colliery, Eng.; 59 killed.—Opening International Maritime Conference at Washington.—R. F. Pettigrew and G.C. Moody elected first U. S. Senators from South Dakota.

17.—Delegates to Pan-American Congress in Detroit and Ann Arbor.—Detroit Regular Army and Navy Union formed.—Detroit Cooking School opened.—Hippolyte elected President of Hayti.

18.—Bishop Thos. F. Davies, of the Eastern diocese of Michigan, consecrated in Philadelphia.—Pan-American delegates in Grand Rapids.

19.—Great prairie fire near Bismarck, N. D.; village of Meneken burned.—Death of D.; Village of Reneword burnets—Dead of King Luis I. of Portugal, and accession of his eldest son, as Carlos I.—Gen. Green B. Raum, of Ill., appointed Commissioner of Pensions. 20.—Violent storms in Italy; Napies partly inundated.—Prince William of Wurtemburg

shot.

23.—News from Stanley and Emin Pasha. Fire in Columbus, O: loss, \$100,000.—Snow in Virginia and Maryland.—Steamer Quinte burned near Deseronto, Ont.; 4 lives lost.— Earthquakes in Mexico.

27.—Marriage of Crown Prince of Greece and Princes Sophie of Prussia.

and Princes Sopine of Prussia.

28.—British ship Bolan sunk; 33 lost.

30.—News of massacre of missionary
Savage, by natives of New Guinea.—Great
destitution in parts of North and South
Dakota, from failure of crops.

#### NOVEMBER.

1.—Blizzard in Colorado and New Mexico: 8 cowboys frozen. 2.—North and South Dakota proclaimed by

the President States in the Union.
8.—Dedication of North Baptist church.

5.—Election day; H. S. Pingree, Rep., elected Mayor of Detroit.—Democratic victories in New York, New Jersey, Virginia, Ohio, and Iowa, Republican in Pennsylvania and Massachusetts. Detroit.

8.—Montana proclaimed a State.

9.—Colonels Swope and Goodloe, prominent politicians, kill each other in an affray at

nent politicians, kill each other in an annay ac Lexington, Ky.

10.—Catholic centenary opens in Balti-more.—Ground broken for Nicaragua ship-canal.—Lord Mayor's day in London; Sir Henry Aaron Isaacs (Jew) installed.

11.—Washington proclaimed a State.— News of Stanley's safety; he and Emin Pasha marching to the coast.

12.—Oraning of the chrysanthemum show

12.—∩pening of the chrysanthemum show in Detroit

13.—Catholic University of America dedicated in Washington.—Dam-burst at Alton, Ontario, with great damage.—Tour of Pan-American delegates ended.

14.—Explosion in royal powder-factory at Hanau, Prussia; 8 killed, 28 injured.—Crerar will probated in Chicago; \$2.250,000 left to found "John Crerar Library" there.

15.-News of revolution in Brazil in favor of a republic, and resignation of the Ministry. 16.—Provisional government abolishes monarchy in Brazil, and banishes Emperor Dom Pedro.—New comet discovered by Director Swift, of Warner Observatory, Rochester.—Holzhey, the Gogebic bandit, found guilty of musels and servenced to imprison and servenc of murder and sentenced to imprisonment for

17.—Great Catholic temperance meeting in Baltimore.—Quarter-centennial of Detroit Y. M. C. A. celebrated.—Yellow fever at Key West, Fla.

18.—Ground broken for North Baptist parsonage, Detroit.—The United States of Brazil established, all provinces concurring.—Explosion of dynamite cartridges in futile attempt

at escape from Jackson prison.

19.—Great floods in Central Pennsylvania and New York.—John B. Allen and Watson C. Squire elected Senators from Washington.—

Steamship Santiago burned 283 miles off Sandy Hook; loss. \$490,000. 21.—Universal suffrage decreed in Brazil. 22.—Steamship Manhattan sunk off Maryland coast; over 20 lost.—Great snow-storm in Montana; serious accidents to Northern Pacific trains.

23.—Detroit Institute of Archæology organised.—J. C. Jacobs, President of Council, and to ther Detroit aldermen, indicted.—Sharpless's mammoth dry-goods house burned, Philadelphia.—Fire in St. Lawrence mine, Butte, Mont.; 9 suffocated. 24.—Train robbery at Berwyn, Ind. Ter.; about \$30,000 taken.

about \$30,000 taken.

25.—Gilbert A. Pierce and Lyman R. Casey (formerly of Detroit) elected Senators from Morth Dakota.—Heela iron-works burned, Williamsburg, N. Y.; loss, \$100,000.—Idaho insane asylum burned, Blackfoot; loss, 8 lives and \$300,000.—Steamship India sunk in Ægean sea; 500 Moslem pilgrims lost.

26.—Great fire at Lynn, Mass.; \$6,500,000 loss.—Fire at Leechburg, Pa., \$80,000 loss.—Michigan cutter works burned, Lowell; \$18,000.

38,000.

27.—Excelsior creamery, Detroit, robbed.—
W. H. Durant, opium smuggler, Port Huron convicted.—Three-ton grindstone exploded at Kalamazoo.—Great fire in Boston; \$5,000,000 loss

-Great storm on lakes; steamer City of Ludington beached near Sturgeon Bay, the Calumet wrecked at Edgewood, with \$100,000 loss, and many other disasters.—Centenary of dedication first Catholic church at Monroe.

29.—Susan B. Anthony in Detroit.—Caspar Haehnle brewery burned at Jackson; \$60,000. —Seven boodler aldermen sentenced in Pittsburg.—W. H. Harvey hanged at Guelph, Ont.
—Toronto "Truth" building burned; \$90,000

30.—Congressman Reed, of Me., nominated | damage.

Speaker by Republican caucus.—Minneapolis "Tribune" building burned; 32 lives and \$160,000 lost.

#### DECEMBER.

1.—Baby hippopotamus born at Central

2.—Congress assembled.—Brewery explodes at Newark, N. J.; \$125,000 loss.—Seventeenth anniversary Presbyterian Alliance, Detroit.

3.—Weich found guilty of Crawford's mur-

der, Detroit.—Earthquake at Alton Bay, N. H.
—State S. S. convention meets in Grand Rapids.

4.—David J. Brewer of Kansas appointed Justice of Supreme Court.—Theater platform collapsed at Weinheim, China; 500 killed. 5. Miner House, East Tawas, burned; 2 lives lost.—Twentieth anniversary Simpson

M. E. church, Detroit. 6.—Stanley and Emin Pasha arrive at Zanzibar.—Battle in South Formosa, China, be-

tween troops and savages; 400 troops killed.
7. Emperor Dom Pedro arrives at Lisbon.
8.—Fires in New York City and Lockport.
N.Y.; each \$250,000 loss.—Earthquake in Italy.
9.—Chicago Auditorium dedicated, Presi

9.—Chicago Atumorium dedicasos, Franche dent Harrison present.
10.—Torpedo explosion near Butler, Pa.
11.—Jefferson Davis burried with great pomp at New Orleans.—Panic in Johnstown Pa., theatre; 12 killed, 50 injured.—Tornada in Southern Pennsylvania.

12.—State Grange meets in Lansing.—Floods in Sacramento valley, Cal.; \$100,000

#### The Death-roll of the Year.

7.—Owen Brown, only survivor of the Harper's Ferry raid under his father John Brown, Pasadena, Cal., 74.

9.—Capt. Chas. M. Averill, Bay City.

13.—Dr. Alexander T. McGill, professor Princeton Theological Seminary, 82.—Mrs. Jay Gould, New York City, 51.

15.—Rev. Dr. Geo. C. Noyes, 15 years Presbyterian pastor at Evanston, III.—Edmond Hédouin artist, Paris, 70.

17.—Ebpraim Longvear, of Lansing, Pass-

17.—Ephraim Longyear, of Lansing, Pasadena, Cal., 62. 18.-Ilma di Murska, prima donna, Munich,

45. 19.—Alex, Karl Louis Martz, chief adminis-

19.—Alex, Karl Louis Martz, chief administrator, Berlin, 66
20.—Isaac Bell, jr., ex-Minister to the Netherlands, New York City, 43.
21.—Hon. Erastus Hussey, Battle Creek, 8.
23.—Alexander Cabanel, artist, Paris, 65.
25.—Chas. A. B. Shepard, of Lee & Shepard, Boston, 60.—Saml. Felton, President Pennsylvania Steel Co., Philadelphia, 80.
26.—Mrs. Nancy Edgarly. Wolfboro. N. H..

President 26.-Mrs. Nancy Edgarly, Wolfboro, N. H.,

1044. 27.—Hugo Fritsch, Austrian Consul-general. New York city. 29.—Prof. M. G. Meninghini, scientist, Pisa,

taly, 78.

30.—Rudolph Francis Charles Joseph Prince Imperial of Austria, Myerling, near Baden, probable suicide, 80.

#### FEBRUARY.

4.—Judge Wm. H. Merrick, Supreme Court District of Columbia, Washington, D. C., 70. 8.—Mrs. John Bigelow, New York City, 60. 10.—Rear-admiral Ralph Chandler, U. S. N. Hong Kong, China, 59. 12.—Dr. John C. Dalton, President Bellevus College of Physicians and Surgeons, 64. 15.—Elmer Sanford, Instructor in Physical University of Michigan. Ann Arbor.

University of Michigan, Ann Arbor.

**DECEMBER** (1888).

2.—John Crawford, Wilmington, Del., 102 years old.
4.—J. C. Morris, ex-Supt. Schools, Colum-

bus, O., 62.

7.—Gen. Wm. N. Blair, Bellefonte, Pa., 76. Thos. Thompson, veteran of '12, Rockport, Miss., 94

10.—Rear-admiral Wm. E. Leroy, U. S. N., New York City, 75.

11.—Colorow, chief of Southern Utes, Ouray Agency, Utah, 70. 13.—Gen. Jas. C. Lane, New York City, 65.

Geo. Routledge, publisher, London, Eng., 76. 17.—George W. Turrill, Lapeer. 18.—Wm. K. Churchill, Portland, 80.—Gen.

Chas. G. Dahlgren, Brooklyn, N. Y., 79.
20.—Capt. Amos D. Allen. Kalamazoo.—
Jas. N. Matthews, proprietor Buffalo Express,
60.—Hon. Henry T. Taylor, Canandaigua,
N. Y., 93.

21.—Oliver Ditson, music publisher, Boston, 77.—George W Marvin, ex-M. C., Manchester,

N. H., 79. 23.-Laurence Oliphant, author, London,

Eng., 59. 26.—Gen. Loris Melikoff, Russian, Nice,

France, 64.
27.—Judge Robt. A. Johnston, Avondale, O., suicide.—Richard B. Hopple, Cincinnati, 72

31.-Luther H. Ludlow, pioneer, Jackson, 74.

#### JANUARY (1889).

3.-Charles O. White, proprietor White's opera in the state of the state opera-house, Detroit.—David Irwin, veteran of 1812. Waseca, Minn., 115.—James O. Hallo-mell Phillips Shakenerian scholar near

17.-Hon. L. A. Nichols of Battle Creek, Greenville, Mich.

21.—James C. Flood, California millionaire, Heidelberg, Germany, 62. 22.—Francis Wharton, international jurist,

Washington, 68.

25.—Richard P Gustin, Bay City, 52.

28.—Col. Frederick Morley, Detroit.

5.—Mary L. Booth, editor of "Harper's" Bazar," New York City, 57
7.—J. V. Williamson, millionaire philanthropist, Philadelphia, leaving \$1,000,000 to charity.—Charles Martini, scientist, Paris, 82.
8.—John Ericsson, inventor, New York

10.—R. W Townshend, M. C. from Illinois, Washington.—King John of Abyssinia and his leading generals, in battle with the dervishes.

visines.

12.—Admiral John L. Davis, U. S. N.,
Washington, 64.—John A. Campbell, ex-Justice Supreme Court U S., 67.

13.—A. S. Welch, formerly Principal State
Normal School at Ypsilanti and U S. Senator
from Florida, Passadena, Cal.

18.—Samuel C. Hall, author, London, Eng.,

20.—Judge Philip H. Emerson, formerly of Battle Creek, Salt Lake City.—Sir Thos Glad-stone, Bart., brother of W E | Gladstone, Fasque, Eng., 84. 22.—Stanley Matthews, Justice U S Su-preme Court, Washington, 65 23.—Prof. George S. Morris, of Michigan University

University 24.—Jacob Gallinger, pioneer, North

Branch, 85. 27.—John Bright, M. P., London, 78

#### APRIL

3.-Prof Wm. Gammell, LL.D., Providence,

R. I., 77.
6.—The Duchess of Cambridge, daughter in-law of George III., London, 91
7.—Perry Joslin, veteran journalist, Holly.
9.—Michel Eugene Chevreul, scientist, Paris,

10.—Rear-admiral T. N. Patterson, U. S. N., Washington, 69.—Fr Damien de Veuster, martyr priest among the lepers, Kalawai, 49.

13.—John P. Usher, ex-Secretary of the Interior, Philadelphia, 78.

14.—S. B. Chittenden, ex-M. C., Brooklyn, N. Y., 75.

Gen Charles K. Genbart.

N Y., 75.

15.—Gen Charles'K. Graham, ex-Surveyor of the Port of New York, Lakewood, N J., 64
19.—Rev B. K. Pierce, editor of Zion's Herald, Newton, Mass., 70
20.—Henry Y. Pearson, postmaster of New York, Highwood, N. J., 46
21.—Sebastian Lerdo de Tejada, ex-President of Mexico, New York City, 63.
23.—Princess Charlotte, sister of the King of Sweden and Norway, Stockholm, 58.
27.—Rev. Dr. F. A. P. Barnard, President of Columbia College, New York City, 79
30.—Wm. N. Barnum, Chairman Democratic National Committee, Lime Rock, Ct, 70.—Carl Rosa, impresario, Paris, 46

#### MAY

1.-Robert W. Weir, artist, New York City,

7.—Count Tolstoi, Russian Minister of the Interior, St. Petersburg, 66.
9.—Maj.-Gen: Wm. S Harney, U. S A, Orlando, Fla., 88.
11.—Henry A Foster ex-U S Senator, Rome, N. Y, 99.
15.—Wm. W. Harding, journalist, Phila-field, Ill., 80.—S. Austin Allibone, American

delphia, 59.—Rear-admiral Edw. Donaldson, U. S. N., Baltimore, 73.

16.—Allen Thorndike Rice, proprietor North American Review and Minister appointee to Russia, New York City, 38.—The Queen of Bavaria and mother of the reigning

King, Munich, 63.

17.—James Howard Harris, Earl of Malmesbury, London, 82.

25.—Laura Bridgman, deaf, dumb, and

blind, South Boston Asylum, 60 30.—Mrs. Sophia F. Ranney, wife of Rev. J. A. Ranney of Kalamazoo, and Misses Carrie and Mollie Richards of Ypsilanti, in the Johnstown disaster.

JUNE
1.—State Senator C. V Tyler, at Bay City.
8.—Mrs. Charles Francis Adams, Quincy,
Mass., 81.—Hon Leonard Swett, lawyer, Chi-

cago.
17.—John Gilbert, actor, Boston, 79 Chas
B. Hebbard, Detroit.
23.—Rev. Wm. H. Beecher, oldest son of

25.—Mrs. Lucy Ware Webb Hayes, wife of ex-Pres. Hayes, Fremont, O., 56.

26.—Hon. Simon Cameron, Lancaster, Pa,

28.—Maria Mitchell, astronomer, Lynn, Mass., 70.—Carlotta Patti Munck, singer, Paris, 49.

30.—Wm. Nowlin, author of "The Bark-covered House," Dearborn, Mich.

JULY.

1.—Theodore Dwight Woolsey, ex-President of Yale College, New Haven, 88.

3.—Cyrus Buell, pioneer, Centreville.

5.—W C Gustin, M. D., Detroit, 48.—Geo, Henry Watrous, ex-President New Haven Railroad, at New Haven, 60.

8.—Herbert A. Pearson, Idaho millionaire, decompad while hething near Chicago.

5—Herbert A. Pearson, Idaho millionaire, drowned while bathing near Chicago.
10.—Benjamin Vernor, Detroit, 68.—S. L. M. Barlow, New York lawyer, Glen Cove, N. Y., 61.—Julia Gardiner Tyler, widow of President Tyler, Richmond, Va., 69
20.—Prof. Alex. Johnston, LL. D., Princeton, N. J., 40.

24.—Charlemagne Tower, Waterville, N.Y,

31.--E. H. Rollins, ex-Senator from New Hampshire, Isle of Shoals, 64.—Rev. Horatius Bonar, hymn-writer, Edinburgh, 80.

August
3.—Maj. John G. Tyler, brother of Prof.
Moses Coit Tyler, Dearborn.
4.—Alex. H. Dey, banker, Detroit —Rev. Geo.
Z. Gray, D. D., Cambridge, Mass., 51.—Felix
Pyat, author and dramatist, Paris, 79.
3.—Gen. Henry Dupont, Wilmington, Del.,
77.—Benedetto Cairoli, Italian statesman, near

Naples, 69.

10 —Hon. Charles W Clisbee, Cassopolis, 12.—Dr. Alexander B Mott, near Yonkers,

N. Y., 63. 15 —Rev. J. H. Bayliss, D. D., editor Western Christian Advocate. Bay View, Mich., 53.

—Prof Elias Loomis, LL. D., New Haven, 78.

17.—Wm Thaw, philanthropist and rail-

way king of Pittsburg, Paris, 70.
25 —Henry Shaw, philanthropist

and founder of Shaw's Botanic Garden, St. Louis,

29.—George F Rowe, dramatist and actor, New York, 60 31.—At Marshall, Ill, Dr. J. H. Haxen,

scholar and author, Lucerne, Switzerland, 73. 4.—Miss Hannah Peltier, French native of Detroit, at Detroit, 84.

David D. Lloyd, playwright and member
 Y. Tribune staff, suddenly at Weehawken,

N. J., 37. 6.—Harry N. Genet, one of the Tweed ring,

New York City.

8.—Dr. Henry Memminger, physician, Brooklyn, N. Y., of wounds received in the late war.

Rev. H. H. Tucker, Baptist minister, by

falling from a window in Atlanta, Ga.

10.—Hon. S. S. Cox, M. C. and ex-Minister to Turkey, New York, 64.—Prof. Clarence Otis, of Hillsdale College.

11.—Capt. Ira Paine, American marksman,

in Paris.

12.—Capt. James Rees, first to make a

steel-plated ship, 69.

13.—Numa de Coulanges, French historian, 13.—Numa de Coulanges, French nistorian, 60.—A. E. Touzalin, President Chicago, Burlington & Northern R. R.—Judge W. M. Olin, Augusta, Ga., 76.—"Aunt" Dinah Young, negro and oldest person in Ky., Louisville, 118.
16.—Daniel Miller, old resident of Macomb Co. and pensioner of 1812, 93.
17.—Dr. Louis Maas, pianist and composer, Boston, Mass.—Bob Younger, most famous robber of the age, Stillwater penitentiary, Minn 45.

Minn., 45. 19.—Jesse Wentworth Payson, chief author

Payson, Dunton & Scribner copy-books, 74.

20.—Rev. Henry Lancashire, of Detroit,
Baratoga Springs, 64.

22.—Prof. Geo. H. Cook, State Geologist of
New Jersey, Rutgers College, 72.—Hon. S. C.
Coffinberry, Conscantine, Mich., 80.

23.—Wm. Wikie Collins, English novelist,
London &

London, 65. 24.—Miss Helen F. Whittemore, librarian

Medical and Library Association, Detroit, suddenly of heart disease, 19.
25.—Hun. D. M. Richardson, Detroit, of paralysis, 63.—Dr. Joseph Beale, Surgeon-General U. S. N., Philadelphia, 74.—Eliza Cook, poetess, Wimbledon, Eng., 71.—Gen. D. H. Hill, of the Confederate army, Charlotte, N. C. 68.

N. C., 68. 26.—Prof. B. E. Nichols, Ann Arbor, killed by runaway horse, 63.—Bishop A. A. Kimball, of Mormon church, Kanoth, Utah.—Rev. Dr. 8. L. Caldwell, ex-President of Vassar College,

Providence, R. I., 69. 28.—Alex. W. Copeland, Postmaster of

Detroit, 60.
30.—Ex-Mayor B. B. Stiles, Denver.—Gen. S. D. Sturgis, Minneapolis.

#### OCTOBER.

1.-W. C. Dole, ex-Commissioner of Indian

Affairs, Washington, D. C.
2.—Ex-Gov. John A. Martin, of Kansas,
Atchison, Ks., 50.

4.—Gen. Asa D. P. Hunt, U. S. A., Manches-

4.—Gen. Asa D. P. Hunt, U. S. A., mancnester. N. H., 62.
5.—Rev. Ezra Jones, Lansing, 72.
6.—A. A. Hard-nberger, ex.M. C., Jersey City, 57.—S. R. R-ed, of Cincinnati Commercial-Gazette staff, on steamship Lahn.—Col. W. L. Buck, Marshall, 62.
7.—Bishop Vail. of Episcopal diocese of Kansas, Bryn Mawr. Pa.
8.—Judge Z W. Bunce, near Port Huron, 100 wary nearly

8.—Junge Z w. Bucce, near Fort Huron, 102, very nearly.

11.—Theo. C. Bataale, French soldier at Waterloo, Opelousas, La., 96.

13.—Gen. H. D Clayton, President Alabama University, Tusvaloosa, 62.—State Seator Peyton Ranney, Kalamagoo, 62.—Ex-Gov. Wm. T. Minor of Connecticut, Stamford, Ct., 78.

14.—Hon. Geo.W. Thayer, Mt. Morris, Gen-

esee Co., 81.-Wm. Neal, oldest resident of Kalamazoo Co., 99.

15.-Ex-Gov. Perry of Florida, Kerrville, Texas.

16.—Rev. Dr. Geo. C. Vincent, Alleghany.

Pa., 77.

17.—David Depue, old settler in Washtenaw
Co., 81.—Gen, John F. Hartranft, Philadelphia, 58.

18.—Dr. I. H. Bartholomew, ex-Mayor of Lansing, 61.—D. D. Trumbull, Jackson Co. pioneer, Sandstone, 83.—Wm. Waterman, Grand Rapids, Wis., 114.—Benj. Moore, oldest man in Southern Indiana, 108, very nearly.

20.—John Crerar, railway official, Chicago, 65.—B. T. Babbitt, soap manufacturer, New York, 80.

21.—Rev. Dr. C. W. Wallace, for 33 years pastor at Manchester, N. H., 85

22.—Lyman Davis, probably oldest man in New York State, Salisbury, N. Y., 114. 23.—J.G. K. Truair, 30 years publisher of the Syracuse Journal, N. Y., 72.—W. W. Dean,

pioneer, Ann Arbor, 85.

24 —Fr. Louis C. Sache, Superior of the

Je-uits, Quebec.

25.—Prof. Leo Lesquereux, botanist and paleontologist, Columbus, O., 83.—Joel R. Moorhead, millionaire, Philadelphia, 77.

26.-Elijah Webber, pioneer, Brooklyn, Jackson Co.

27.—G. B. Van Valer, Mayor of Hillsdale, 72.—Sabin M. Nichols, pioneer, Grand Prairie, Kalamazoo Co., 84.—Hon. John M. French, pioneer, Lansing, 91.

28 .- Alex. Merrio, ex-Lieut.-Gov. of Mani-

toba.

31.—Judge Chauncey Joslyn, Ann Arbor,76.

1.—Rev. Dr. L. Van Bokkelen, Buffalo, 74.—Hon. Jas. E. Calhoun, cousin of John C. Calhoun, Abbeville, S. C. 93.

2.—Hiram Tilson, veteran of 1812, Niles, 93. 3.—Hon John Geddes, Ann Arbor, 88.

4.—Maj. A. W. Mehan, postmaster at Mason.
7.—Leister Peocock, Detroit, 60.
8.—W. S. Caulkins, pioneer, North Lansing,
82.—Capt Hugh McTavish, Port Huron, 77.—
Clarence S. Yates, journalist, Detroit, 28.—
Wm. B. Hart, State Treasurer of Pennsylvania Harthy State

vania, Harrisburg.

10 —Oliver S. Smith, member Mich. Ho. Reps., Owosso, 50.—Gen Thos Francis Burke, Irish patriot, New York City.

11.—Bissell Robinson, pioneer, Oxford, 86.—Hirm Jenison, pioneer, Jenisonville, Ottawa

-Hiram Jenison, pioneer, Jenisonvine, Ottawa Co., 76.—Mrs. Louise Cloutier, Chicago, 100. 12.—Col. Alfred Rhett, son of R. Barnwell Rhett, Charleston, S. C. 60.—L. R. Davis, Kalamazoo Co., pioneer, 80. 13.—Rev. Wm. Smith, D. D., ex-pastor Mary W. Palmer M. E. Church, Detroit, on

ocean steamer Ems.

14.—Rev. Jay A. Wight, D. D., Bay City,
78.—W. N. Smith, Chief Justice North Carolina Supreme Court

15.—Lorenzo Bixby, Kalamazoo, 78.—Isaac

Lewis, pioneer, Monroe, 85.

17.—Dr. Wilson, chief law-clerk Canadian

New York House of Commons, suddenly in New York City.

18.—Thomas McElhaney, early settler, Flint, 68.

23.—James T. Burke, Detroit, 53.

24.—George H. Pendleton, ex-Minister to

Germany, Brussels, 64. 25.—Wm G. Brownlee, crushed by rolling

25.—Wm. c. Browniee, crusned by roung logs at his mill near Detroit, 52.
27.—Henry Durrell, ex-alderman, Monroe.—Minor S. Newell, ex-Commissioner of the State Land-office, Flint, 66.
29.—Martin Farquhar Tupper, London, Eng., 79.—Judge G. T. Gridley, Jackson, 78.

**30.**—Prof. Robt. Patterson, Presbyterian editor, Pittsburg.

#### DECEMBER.

1.-Z. M. Lester, Marshall, 76.-Wm. A. Haslett, Charlotte.

3.—Wm. A. Innes, Grand Rapids, 32.—Collector Wm. Benson, Windsor, 77.
4.—Chauncey S. Dutton, old settler, East Saginaw, 79.

5. John J. Townsend, President Union lub, N. Y. City, 64.—Dr. Orville Marshall, ansing, 52.—Thomas Maybury, formerly of Lansing, 52.—Thomas Maybury, formerly Detroit, Red Bluff, Cal., 45.
6.—Jefferson Davis, ex-President C. S.

New Orleans, 81.—Com. J. D. Kitchell, Rich-

mond, Va., 79.—Gen. G. W. Palfrey, Boston historian, Carnes, France.

7.—Prof. Henry S. Frieze, Ann Arbor, 72. 9.—Prof. Alphonse Cornevin, Detroit.— 7.—Prof. Henry S. Frieze, Ann Arbor, 72.
9.—Prof. Alphonse Cornevin, Detroit.—J.
H. Rathbone, founder Knights of Pythias,
Lima, N. Y., 50.—Prof. Wm. F. Allen, Madison, Wis.—"Aunt Mary Tyler," of "Mary had
a little lamb," Somerville, Mass., 83.
11.—Rev. Dr. J. R. Kendrick, ex-Pres. Vassar College, Poughkeepsie, N. Y.—E. N. Dickerson, great patent lawyer, New York City.—
Oliver Johnson, Brooklyn, N. Y., 80.
12.—Robert Browning, poet, Venice, 77.—
Edw. Bradley ("Cuthbert Bede"), London,
13.—Rev. Luther Lee, oldest M. E. Minister
in State, Flint.

in State, Flint. 14.—Frank B. Gowen, Washington, suicide.

### The Sporting World.

#### Athletic Events.

In view of the local and general interest in the Amateur Athletic Union, and for the benefit of the four local athletic clubs, the records of the more important events are here given.

EVENT.	BEST RECORD.	MADE BY	DATE.	PLACE.
100 vard dash*	American, 10 sec	R. L. La Montague	June 29, 1878	New York City.
• • • • • • • • • • • • • • • • • • • •	.  **	W. C. Wilmer	Oct. 12, 1878	
"		L. E. Myers	Sept. 18, 1880	} 46 46
"		E. J. Wendell	May 24, 1881	Camb'ge, Mass.
"	J "	Wendell Baker	July 1, 1886	Boston.
"		V. E. Schifferstein.		Oakland, Cal.
"	66	Fred Westing		New York City
**	"	Luther H. Cary	June 15, 1889	Detroit
"	English	A Wharton	July 3 1886	London Fng
195 verde	American, 12 2-5	C H Sherrill	May 4 1880	Now York
220 yard deght	American, 22 sec	Wendell Raker		Boston.
wo yaita aasiii	English 21 4.5 sec	C G Wood	Tune 95 1907	T ondon
440 ward min	English, 21 4-5 sec. American, 4734 sec English, 4816 sec	Wandell Baker	Tule 1 1000	Donton.
Ho yaiu run	Fnglish 4814 vec	U C T Tindell	Tune 90, 1000	boston.
Half mile man	Amorion 1 m 551/ coo	W. C. D. Imuan	June 30, 1669	London.
naii mile run	Americ'n, 1 m. 5514 sec.	E I II Coope	June 22, 1889.	Travers Island.
	English, 1 m. 54 2-5 sec	T. J. H. Cross	march 9, 1888	Oxford.
One mile run	Amer., 4 m. 21 2 5 sec.	W. G. George	NOV. 11, 1882	New York.
•••		w. G. George	July 29, 1882	London,
Two mile run	Amer., 9 m. 38 3-5 sec	E C. Carter	July 10, 1886	Brooklyn.
	English, 9 m. 17 2 5 sec.	W. G. George	April 26, 1884	London.
120 yd. hurdle race		ł i		
over 10 hurdles	4			
3 ft. 6 in, high	American, 16 1-5 sec	A. A. Jordan	Sept. 19, 1888	Detroit.
•••	English, 16 sec	C. N. Jackson	Nov. 14, 1865	Oxford.
"	<b>)</b>	o. raimer	ADEIL ID. 1878.	London.
• • • • • • • • • • • • • • • • • • • •	ł "	IC. T. Daft	July 3, 1886	***
		S. Joyce	June 3 1888	Crew.
Three mile walk	1A.mer., 21 m. 9 1-0 sec	IF. P. Murray	INAT 6 1999	New York.
**	Eng., 21 m. 25 1 5 sec American, 6 ft. 4 in	C. W. V. Clark	June 90 1887	London
Run's high jump.	American, 6 ft. 4 in	W. Byrd Page	Oct. 7 1887	
8 - 6 - 6	English, 6 ft. 316 in	W. Byrd Page	Aug 15 1997	Ctourbuides
Run's broad jump	English, 6 ft. 3½ in American, 23 ft. 3 in English, 23 ft. 2 in American, 11 ft. 5 in English 11 ft. 7 in	M W Ford	Aug. 14, 1996	Procklyn
Train B offern Jump	English, 23 ft. 2 in	P Davin	Cant 19 1000	Down Aulin and an
Pole vault	American 11 ft 5 in	H H Royter	Oct 15 1007	Nort Arington,
1010	English, 11 ft. 7 in	F I Stones	Tuno 0 1000	New York, [Ire.
Throwing 56-pound	1211g 11511, 11 10. 1 111	E. II. Stolles	June 2, 1000	Southport.
weight 7 ft circle	American 20 ft 1 in	T C Witchell	NT 0 1000	
weight-" In Circle	American, 30 ft. 1 in	J. S. MICCHEIL	NOV. 0, 1888	New York.
Putting 16 lb shot	English, no record American, 45 ft. 2 in	Coores B. Coor	35 44 4000	
r uccing 10-10. Shot	Tradiah 44 ft 10 :-	J. O'Dries	May 14, 1889	Barrie, Ont.
Mh	English, 44 ft. 10 in	J. O'Brien	July 11, 1885	Dublin.
Throwing 16-pound	9	1	j	i
hammer from		l- ~		l .
IL CIPCIO	American, 182 ft. 9 in	J. S. Mitchell	June 12, 1889	Bergen Point.
	English, 121 ft. 3 in	J. S. Mitchell	Sept. 19, 1886	Limerick.

<sup>\*</sup>J. Owen, jr., ran 100 yards at Detroit Aug. 3, 1889, in 9 4-5 seconds, but as he was aided by a half-gale of wind, the record was not claimed.

tJ. Owen, jr., covered 220 yards in 21 2.5 seconds at Detroit Aug. 8, 1889, but did not claim the record, as he was helped along by a strong wind.

Thomas Ray is reported to have vaulted 11 feet 8½ inches at Barrow, in Furness, Eng.,

but the performance is doubted.

#### Champions of the World.

Base Ball.—New York Club.
Bicycling.—1 mile, W. A. Illston, in 2:02 (doubtful): 5 miles, W. A. Rowe, 18:23 4-5; 25 miles, F. F. Ives, 1:14:23 1-5; 100 miles, F. E. Dingley, 5:28:44 1-5; 1 hour, W. A. Rowe, 22 miles, 150 yards. W. A. Rowe holds the title of champioq. Albert Shock rode 1405 miles in 6 days and W. J. Morgan rode 224 miles without dismounting, in 16 hours and 20 minutes.

wites. Tricycling.—One mile, R. Howell, in 2:492-5; 5 miles, G. Gatehouse, 14:273-5; 10 miles, T. Battensas, 29:418-5; 25 miles, T. W. Allard, 1,18:32; 150 miles, in 10,18:292-5. H. R. Goodwin rode 2050½ miles in 19 days.

The Turf.—1-mile trot, Maud S., 2:0834; 1-mile pace, vith running mate, Westmont, 2:0134; 1-mile pace, with running mate, Westmont, 2:0134; 1 mile running, Ten Brock, 1:3894.

Pedestrianism.—100 yards, M. K. Kettleman, Jan. 26, 1889, 934 seconds; 220 yards, C. G. Wood, 21 3-5 seconds; 440 yards, W. Baker, 4734 seconds; 880 yards, F. Hewitt, 1:5314; 1 mile, W. G. George, 4:1294; 5 miles, J. White, 24:40; 50 miles, J. E. Dixon, 6:18:26 1-5; 100 miles, C. Rowell, 13:26:30; 6 days, G. Littlewood, 623 miles, 1 hour, L. Bennett, 11 miles, 970 yards.

wood, 623 miles, 1 hour, L. Bennett, 11 miles, 970 yards.

Walking.—1 mile, W. Perkins, 6:23; 5 miles, J. W. Raby, 35:10; 100 miles, A. W. Sinclair, 19:41:50, greatest distance walked without rest, 12 miles 385 yards, C. A. Harriman; 1 hour, 8 miles 302 yards, John Meagher.

William Spencer, England, walked 5306 miles in 100 days in 1884. He was 64 years old, and walked both out of doors and in halls

walked both out of doors and in halls.

Swimming.—1 mile, Chas. F. Senk (straightway), 12:42½; 5 miles, C. Whyte, 1:04:23. away), 12:4214; 5 miles, C. Whyte, 1:04:25. Capt. Webb kept afloat 60 hours without assistance of any kind.

sistance of any kind.

Skating.—1 mile, Timothy Donoghue, 2:12-3-5; 2 miles, Joseph F. Dougherty, 6:24; 5 miles, J. F. Dougherty, 16:45; 10 miles, F. Dowd, 35:58; 50 miles, S. J. Montgomery, 4:13:36; 100 miles, John Ennis, 11:37:45; 1 hour, Alex. Paulsen, 16 miles, 590 yards Anna Clark Jagerisky skated 30 hours consecutively with but 30 minutes' rest at Detroit in 1868. Paulsen is champion.

Paulsen is champion.

Rowing.—114 miles, Watkins, N Y., crew (at Detroit), 7:4634; 2 miles (with turn), C. Courtney and F E. Yates, 12:16; 3 miles, four oars (straightaway), Argonautacrew, 15.374; eight oars, Cornell U. B. C., 17:3844; single scull, Jake Gaudaur, 19:54; 5 miles, Harlem River crew, 30:4434; single scull, Edward Hanlan, 33:5614; 10 miles, Joshua Ward, 1:23; 50 miles, C A. Bernard, 8:55:20. W. O'Connor, champion of America; Henry Searle, champion of world.

pion of world.

The famous America's cup was won in 1851
by the yacht America over the Aurora, off
Cowes. It has since been won by English
yachts 18 times, Scotch boats have won it 7
times, and United States yachts have been
victors 32 times in races for this trophy
Yale College has won the inter-collegiate
races 11 times and Harvard 10, Yale winning
the proces of the legt six went.

the races of the last six years.

The canoe (international) championship was

won by the Leslie in 1836

won by the Lesie in 1886

Jumping.—Running long jump (with
weights), John Howard, 29 ft. 7 in.; standing
long jump (with weights), G. W. Hamilton,
14 ft. 5½ in.; (without weights), H. M. Johnson,
10 ft. 10½ in; running high jump, W. B. Page,
6 ft. 4 in.; standing high jump, T. F. Kearney,
5 ft. 5¾ in.; pole vault, T. Ray, height, 11 ft.
6¾ in.; horse, Chandler, 37 feet in long jump;
horse, high jump, 6 feet 11¾ inches.
Glass-ball Shooting.—Capt. A. H. Bogardus,
5500 glass balls broken, out of 5854 thrown

from trap. W. F. Carver hit 60,016 objects, out of a possible 64,881. Fast Time.—Locomotive on Pennsylvania

Fust Time.—Locomotive on Pennsylvania railroad, 1 mile in 50½ seconds; steamer City of New York, from Roche's Point, England, to Sandy Hook Bar, 6 days and a triffe over 8 hours; salling vessel, Liverpool to N. Y., Dreadnaught, 12 days 5 hours 25 minutes; 25 miles in 1 hour by the steamer South America on the Hudson river; yacht Volunteer champion, and holds the America cup; yacht Duritan exiled 38 miles in 3,90.27 Puritan sailed 38 miles in 3.32:37.

Pugilism.—Heavy-weight, John L. Sullivan; middle-weight, Jack Dempsey; light-weight, Jack McAuliffe; feather-weight, Tommy War-

ren

Boxing weights: Feather weight, 116 to 126 pounds; light weight, under 140 pounds; mid-dle weight, 140 to 158 pounds; heavy weight, over 158 pounds.

over 188 pounds.
Sullivan and Kilrain fought at Richburg,
Miss., July 8, 1889, for \$20,000. The largest
prize in any previous battle was the \$10,000
prize fought for by Yankee Sullivan and Tom
Hyer in 1849. The longest battle fought was
between John Smith and James Kelly, in Australia in 1865. Time, 6 hours 15 minutes.

Billiards.—Harvey McKenna holds the record for the biggest run, and M. Vignaux holds the record for the best run in the 14-inch balk-

line game

Tennis Player.—R. A. Seers.

Chess Player.-Capt. McKenzie is the champion.

Checker Player.—Clarence A. Freeman.
All-round Athlete.—Duncan C. Ross.
Miscellaneous.—Yale College holds the foot

ball collegiate championship for 1888, and Princeton for 1889 In aerial jumping Sam Patch was the first champion, and Steve Brodie is the present holder of the champion ship. Dr. Tanner's fasting record of 42 days has not been broken.

Wrestling Champions.—Catch-as-catch-can and Lancashire, Joe Acton; Græco-Roman, William Muldoon; square-hold (collar-and-elbow), John McMahon; mixed style, Matsada Sorakichi.

Notable Performances.-Longest ball game, Author Performances.—Longest ball game, 24 innings, between the Harvard and Machester clubs, at Boston, May 11, 1877. John Hatfield threw a base ball 400 feet 724 inches. W. B. Kenney threw a lacrosse ball 446 feet in Australia in 1886. Joseph McCann set 6300 metallid minion in 2 bours alled minion in 2 bours and the set 6300 metallid minion in 2 bours alled minio ems solid minion in 3 hours, with helpers to empty sticks. Edward Brown swung a pair of 8-pound Indian clubs 6 hours 20 minutes without rest Two carrier pigeons flew 700 miles in 100 hours from Madrid to Belgium. Detroit base ball club played 188 games in 1887. Steam fire-engine No. 11 of Chicago threw a stream 340 feet 3 inches horizontally threw a stream 340 feet 3 inches horizontally with 130 pounds' pressure, and 180 feet perpendicularly Steamer Robert E. Lee made the trip from St Louis, Mo., to New Orleans, La., in 3 days, 18 hours, 14 minutes. John Malone, Chicago, dressed a bullock in 3 minutes and 40 seconds, go-as-you-please style, and Lewis Heller dressed 20 sheep in 39 minutes 40 seconds. J. McMaster's dog Nigger ran 100 yards in 634 seconds, and holds the record. J. O. Fellows climbed 17 feet 6 inches. record. J. O. Fellows climbed 17 feet 6 inches, hand-over-hand, on a rope, dead start, in 1 seconds. Peter Johnson stayed under water 434 minutes in Music Hall, London, in 1882 David L. Dowd lifted 144214 pounds with hands in 1883, and with harness W. B. Curl lifted 3239 pounds in 1888. Neither record haven Charles Charles and the second harm the s htted ozos pounds in 1005. Neither record in been broken. Andrew Cutler drew himsel up by his little finger six times, and with on hand twelve times in 1878, at Louisville. boat Scud holds the record, having made

miles in 20 minutes 40 seconds, in 1878. neth A. Skinner holds the roller-skate championship, having made one mile in 3 minutes il seconds, and five miles in 15 minutes 50½ seconds. C. C. Lee, Yale College, made a run-

ning kick of 9 feet 8 inches, and holds the record. J. E. Duffy, Ann Arbor, claims to have made a drop kick in foot-ball of 168 feet 71/2 This performance is not authentiinches.

**Racing Notes** 

Following is a list of the fastest trotters | I and pacers:

and pacers:
TROTTERS.—Maud S., 2.0634: Jay-Eye-See, 2.10; Sunol, 2.1046; Guy, 2.1034; St. Julien, 2.1134; Axtell, 2.13; Belle Hamilu, 2.1334; Maxey Cobb, 2.1344; Harry Wilkes, 2.1334; Bonny McGregor, 2.1334; Phallas, 2.1334; Palo Alto, 2.1334; Sunol, 2.1334; Clingstone, 2.14; Goldsmith Maid, 2.14.
PACERS.—Johnston, 2.0634; Gold Leaf, 2.1134; Little Brown Jug, 2.1134; Sleepy Tom, 2.1234; Buffalo Girl, 2.1246; Richball, 2.1234; Brown Hal, 2.124; Roy Wilkes, 2.1234; Mattie Hunter, 2.1234; Hai Pointer, 2.13; Arrow, 2.1334; Bessemer, 2.1334; Gossip, jr., 2.1334; Budd Doble, 2.1334. mer,

The relative merits of the American and Australian thoroughbred horses have come in for a considerable amount of discussion in the turf papers of the United States, and the opinions expressed have been diversified inopinions expressed have seen diversined in-deed. The prevailing opinion among horse-men is that the Australians are possessed of greater stamina and are better weight-car-riers than the American thoroughbreds, but are not so speedy, especially at short dis-tances. The records of the two countries can thus be compared:

Notes.	.•	-
Dist.	AUSTRALIA. Sextant	Time.
16m	Sextant	4794
56m	Forrester	1 . 01
%m	St. John	1.273/4
1 m	Crossfire	1 . 41 -
1⅓m	Mentor	2.08
1½m	P. Imperial Coriolanus Dunlop Trident	2 85%
1¾m	Coriolanus	8.04
2 m	Dunlop	8.2814
8 m	Trident	5.25%
Dist.	AMERICAN. OlitipaSam HarperKingstonStuyvesant	Time.
16m	Olitipa	473/4
58m	Sam Harper	1.001/2
36m	Kingston	1.271/4
i m	Stuyvesant	1 . 40 ื
154 <b>m</b>	Dry monopole	2.07
1‱, m	Firenzi	2.84
134m	Glidelia	8.01
2 m	Wild Moor	8.281/6

The time made in races only is given above Ten Broeck holds the record for a mile and two miles, but it was made against time, and not in a race. It will be seen that there is a very little margin in favor of our horses, and it also must be borne in mind that the Australian between the second of tralian horses carry much more weight than the horse in this country.

#### The National Game.

The base-ball season of 1889 was one of considerable interest, both to Detroit, because of its position in the International League, and to Michigan generally, because of the forma-tion of a strong State League. The amateur athletic clubs in Detroit also formed a compact league that played out a regular sched-ule, the D. A. C. nine being the winners. The Jackson club was awarded the State League pennant

The clubs in the International League, after a close and exciting fight, finished as follows:

CLUB.	Won.	Lost.	PLAYED.	PER CENT.
Detroit	72	89	111	649
Syracuse	. 64	44	108	598
Rochester	. 60	50	111	545
Toledo		51	105	514
Toronto	. 56	55	109	505
London	51	55	106	481
Buffalo	41	65	106	404
Hamilton	35	74	109	821
1	433	433		

## The Press.

AMERICAN NEWSPAPER PUBLISHERS' ASSOCIA-

AMERICAN NEWSPAPER PUBLISHERS' ASSOCIATION.

An association of about 150 daily newspapers was organized at Rochester, N. Y., under this title, in February. 1887. The second annual meeting was held in Indianapolis in 1888, and the third last year in New York City, where the session of 1890 will probably be held February 12th. The association has a New York office in Room 206, Potter Building, in care of Mr. G. M. Brennan, Manager. Annual dues, \$50; initiation fee, \$20. Officers: President—James W. Scott, Chicago. Vice-president—Col. Taylor, Boston. Secretary.—F. K. Misch, San Francisce. Treasurer—W. M. Laffan, New York. Executive Committee—S. H. Kauffman, Washington; Maj. W. J. Richards, Indianapolis; J. H. Farrell, Albany; W. C. Bryant, Brooklyn; Col. L. L. Morgan, New Haven.

#### NATIONAL EDITORIAL ASSOCIATION.

Organized at New Orleans, during the World's Fair. Second session in Cincinnati, February, 1886; third at Denver in June, 1887; fourth at San Antonio, Texas, November, 1888; fifth at Detroit in August, 1889; and the sixth

will occur in Boston at a date to be fixed by the Executive Committee. The basis of the organization is a delegation from each State Press Association, including the President, Secretary, and one additional delegate for each 25 members. The officers are as follow: President—Charles A. Lee, Pawtucket, R. L

Corresponding Secretary-John M. Doane, Columbus, Ohio.

Recording Secretary-Wm. Kennedy, Pottsville, Pa.

Treasurer-A. H. Lowrie, Elgin, Ill Member for Mich. on Ex. Com., E. H. Spoor.

#### MICHIGAN PRESS ASSOCIATION.

The twenty-second anniversary of this association was held at Grand Rapids in July, 1889. Membership open to all Michigan editors and publishers. The fee is \$2.00. The twenty-third annual meeting will be in East Saginaw, at a date to be fixed by the Executive Committee. Officers:

President—Perry F. Powers, Cadillac.
Vice-president—C. T. Fairfield, Eaton

Rapids. apius. Secretary—Fred Slocum, Caro. Treasurer—N. H. Miller, Chesaning.

Executive Committee—Geo. F. Lewis, Saginaw; Chas. W. Peters, Saginaw; Theo. Quinby, Detroit; A. McMillan, Bay City; Fred naw : Chas. Rushell, Saginaw; Robt. Swing, Saginaw.

#### THE MICHIGAN LIBEL LAW.

Sec. 1. In actions for libel, if there is no proof of express malice, or the court or jury shall find there was no such malice, then no exemplary or punitive damages shall be inferred from the nature and tone of the statements claimed to be libelous.

Sec. 2. No exemplary or punitive damages shall be recovered unless the plaintiff shall, before bringing suit, give notice by mail or otherwise, to the defendant to publish a retraction of the libel, and allow the defendant a reasonable time in which to publish such retraction, and make such amends as are

reasonable and possible under the circumstances of the case. Proof of the publication of any such retraction or correction shall be admissible in evidence under the general issue on the question of the good taith of the defendant, and in mitigation and reduction of damages. Provided, that the retraction shall be published in the same type and in the same editions of the paper as the original libel, and so far as is practicable in the same position. [Passed June 26, 1889.]

This law has not been tested, but is undoubtedly unconstitutional. It is a crude substitute, drafted by a member of the last Michigan Legislature, for the bill asked by the Michigan Press Association, which was not open to the objection of the one passed, i. e., that of being class legislation.—Ed. Detroit Journal Year

Book.

#### The Floral Exhibitions.

THE FIRST (May 30, 1898.)
Early in May in 1888, The Detroit Journal offered to assist the Detroit G. A. R. in decorating the soldiers' monument on the 30th of May. The offer was accepted, and The De-May. The offer was accepted, and the troit Journal proceeded to interest the children of the State in the gathering and the sending in of wild flowers. The American and The Ame United States express companies generously gave free transportation to the flowers. weather was most unfavorable, and the three days before May 80 were exceedingly stormy, but so great was the enthusiasm which had been awakened, that the baskets of flowers came in by the hundreds, until a large vacant store was filled with them, and a large com-mittee of ladies was unable to handle them all. Not only was the soldiers' monument decorated, but baskets of flowers were sent to all the hospitals, and wreaths of flowers were put upon all the soldiers' graves, and the remainder were placed, in almost lavish profusion, on or about the soldiers' monument.

#### THE SECOND (April 2, 3, 4, 5, 6, 1889.)

In October, 1888, The Detroit Journal enlisted the ladies who constitute the boards of managers of 21 of the Detroit charities, in the organizing and holding of a floral exhibition. for the benefit of these charities. Each of the boards elected a lady to represent them, and these 21 ladies elected the following officers:

General Manager—W. H. Brearley, Secretary—F. E. Farnsworth. Treasurer—F. D. Taylor. The florists and several musical societies

heartily co-operated. Each charity erected a floral booth and chose a flower, which they sold. The exhibition, which was of rare beauty, was patronized beyond the most sanguine expectations, the total attendance being 34,501, and the net cash received from all sources \$11,001.75, or an average of over \$500 for each charity.

#### THE THIRD (April 22, 23, 24, and 25, 1890.)

The conspicuous success of the 1889 Floral exhibition led the ladies to petition the DE-TROIT JOURNAL to organize another and greater exhibition for 1890. In this petition greater exhibition for issu. In this petition the florists, musicians, and artists joined. The work was early inaugurated, and by June, 1889, was fully organized, in the election, by each charity, of a representative, who should act upon the advisory board, and later, by the re-election, by these ladies, of the general officers of the previous exhibition.

At the date of the issue of this edition of the

Detroit Journal Year Book (January 1, 1890). the preparations are in an advanced and promising condition. Three or four additional charities have been admitted. The different choruses of Detroit will combine in a grand chorus, and with about 100 students from the Normal School, and a chorus of 600 children, will make the musical feature a prominent one. There will be an art department, inent one. There will be an art department, a microscopical, a refreshment, and a phonograph, all to add to the effect to be produced by the 25 floral booths (many single booths costing as high as \$500), and the display of the florists who are stimulated to a friendly rivalry by the \$1700 premium list. All the railroads will run half-fare excursions, and the admittance will be 25 cents. An elegant official catalogue will also be prepared and sold for 25 cents.

The ladies have consented to the erection of a Detroit Journal booth, to be conducted in a DETROIT JOURNAL BOOCH, to be conducted in the interest, equally, of all the charities, and it has been decided to erect it in the archite-ture of Venice, to be known as the Venetian booth. The committee, who will have this in charge, will consist of one lady from each of the charities. It will be a conspicuous and elegant booth, one of the finest at the exhib-tion and its chief object of interest will be tion, and its chief object of interest will be a "Golden Book," which the ladies will ex-



hibit to visitors, and which will be used, under certain conditions, as a register of names for visitors. The Detroit Journal predicts that the net cash surplue, which will result from this exhibition, will be at least \$100,000.

### The Detroit Journal.

#### A Portrait of the "Able" Editor

The editor of the modern newspaper is im-

personal.

The days when a Greeley, a Raymond, a Bennett or a Bryant stood for the papers they owned; when their individuality was supposed to penetrate the whole new paper; when many of their readers imagined that the editor wrote every line of original matter—those days have all gone by.

The newspaper has become so wide and complicated an affair; it requires the labor of so many different persons to produce its many departments that the editor, that is, the one person who gave it its tone or flavor, has dis-appeared. Nevertheless, the Journal yearbook publishes on this page a picture of the

editor of the DETROIT JOURNAL.

It is not a portrait of the managing edi-tor, or of the edito-rial writers, or of the city editor, or the editor of the news, of the State, or the general news editor, or the editor of the literary department, or the selections, or of the sporting editor, or the society editor, or the marine reporter, or any of the staff

of reporters.

It is not a picture of any one, but of all,

of these.

It is what is called "a composite pict-ure." It is a portrait of all the editors and reporters whose combined labor and cooperative toil produce the Detroit Journal every week-day.

The picture is the result of first taking a separate photographic negative of each member of the editorial staff.

From these 13 neg-ives copies were atives printed in succession

one on top of the other until the face and features and the outline of the heads and shoulders were blended into one.

The portrait therefore contains the marked features and contours of the editorial staff of the Journal. and hence is known as the "composite photograph."

It is the labor of this composite editor that

every day lays before the readers of the JOURNAL the varied contents of its pages. Its news from all quarters of the globe.

From India and Japan, from Kalamazoo and Theboygan; from London and St. Petersburg; rom the center and suburbs of Detroit. Likewise its independent expression

ppinion on all subjects of current interest.

Its quips and jokes that amuse, its informing saragraphs of all kinds gathered from a housand sources.

Its fiction that entertains and fascinates.

Its gos-ip, its freshest intelligence of the ery latest occurrences that have taken place etween dawn and twilight.

In the year-book for 1891 a composite por-trait will be given of the 49 additional salaried men who are daily employed by the DETROFT JOURNAL in its mechanical and business departments.

Possibly a composite will also be given of the 400 correspondents, who send in news

from all parts of Michigan.

Another also of the 300 agents who distribute the Journal in the cities and towns throughout the State

Another still of the 73 carriers who dis-tribute the Detroit Journal in Detroit.

It may be p s-ible to make a composite of the over 2,000 licensed news boys who sell the paper in D-troit and Windsor, or who deliver the JOURNAL regularly to routes of regular customers

whom they control.

THE JOURNAL NOT AN "ORGAN.

THE DETROIT JOUR-NAL is an independ-



COMPOSITE PHOTOGRAPH

OF THE

#### DETROIT JOURNAL EDITORIAL STAFF.

ent paper. This does not mean that THE Detroit Journal is neutral. Far from it. It does mean that THE JOURNAL avoids the gall and the bitterness of the party organ; that it treats every question on its merits; that its one aim is to tell the truth, the whole truth, and nothing but the truth about every man who comes under public notice, and about every measure that comes up for public discussion.
In the heat of party

conflict, when the organs are exaggerat-ing the merits of th-ir own side and slighting the merits of their opponents,

The Journal gives without bias or prejudice the facts in the case, believing that what readers want is, first of all, absolute truth, so that they may form their own opinions.

THE JOURNAL'S trusty correspondents and able editorial writers keep the public informed on all matters of public interest; and the paper aim to form public opinion by giving all sides of a matter in its news columns, and then discussing the question in its true bearings.

OBSERVANCE OF THE SABBATH

THE DETROIT JOURNAL believes in the observance of the Sabbath. It is the only daily in Detroit which publishes no Sunday edition.
On Saturday a double sheet, eight pages in size, provides a vast amount of carefully selected and well edited reading matter. So carefully is this matter prepared that, without additional expense to its readers. The Journal is able to give more good stories, brighter foreign, metropolitan and Washington news and gossip than any other paper in the city.

#### Detroit's Annual Floral Festival.

Industry, Mrs. Agnes d'Arcambal, 800 Second ave. (11) House of the Good Shepherd, Mrs. Joseph B. Moore, 116 Alfred st. (12) Industrial School, Mrs. M. R. Woolley, 36 Bag-A prominent Detroit business man a few years ago lamented the fact that while New Orleans had its annual mardigras carnival, St. Louis its veiled prophet festival, and Minneapolis its ice palace anniversary, Detroit was without any distinctive local holiday feature, that would advertise the name and fame of Detroit throughout the land. The Detroit Journal claims that this has now ley ave. (18) Open Door Society, Mrs. Kinzle Bates, 57 West Canfield ave. (14) Protestant paces, or west canneto ave. (14) Protestant Orphan Asylum, Mrs D. M. Cooper, 501 Jefferson ave. (15) St. Luke's Hospital, Miss Emma Parker, 56 Lafayette ave. (16) St. Vincent's Orphan Asylum, Mrs. H. D. Barnard, 383 Jeferson ave. (17) Thompson Home, Mrs. John Everett Evans, 33 Alfred st. (18) Woman's Chestifing Massachia Miss. been accomplished in the annual floral and musical charity festival, which is entirely unique, and so far successful beyond the most sanguine expectations. The Journal is extremely gratified at this happy result, but acknowledges that to the committee of ladies, who co-operated so cordially and Everett Evans, 35 Airred st. (18) Woman's Christian Association, Miss Mary B. Stewart. 440 Jefferson ave. (19) Woman's Hospital and Foundling's Home, Mrs. Wm. C. Mc-Millan, 452 Jefferson ave. (20) Woman's Relief Corps, Miss Lydia Hopkins, 430 effectively, and to the florists, musicians ish st. (21) Young Woman's lone, Mrs. L. B. Austin, 96 East Canfield ave. (22) Zoar Orphan Asylum, Mrs. Oswald Tschaand artists whose efforts were so es-Brush st. sential, belongs great, if not the greatest, credit for the brilliant Home, success accomplished. che, 106 Gratiot ave. THE LADIES AND THE CHARI-THE FOUR DAYS OF THE TIES The 22 charities, which FESTIVAL. will participate this are indicated on the year (arranged alphaaccompanying calbecember January betically), and the endar. They will come about two ladies who will represent them weeks after are as follows: Easter, (1) Bethel, which oc-Mrs. E ward Edcurs this year on Smith. April 1021 THE MELL 6 th. DETROIT JOURNAL FOR 1890 128 PACES JOVENAL Free to all The B YEAR OF exhibit Wood-PVBLICATION SUBSCRIBERS of orchids is to be Ward ave. a prominent Casino Tabfeature. The ernacle, Mrs following De-E. L. Shurley, 104 Winder st. (3) Children's Free troit firms have been secured to join aun the Detroit Journal (8) Chuaren's Free
Hospital, Mrs. Geo.
H. Lothrop, 143 West
Fort st. (4) Day Nursery and Kindergarten,
Mrs. D.V. Bell, 6 Adams ave. in offering a list of 10 costly and unique special premiums, and all for orchids: (1) Detroit Journal
Diamond set badge. (2) Diamond set badge. (2)
Newcomb. Endicott & Co. \$\frac{3}{2}\$
fan. (3) Mabley & Company—
"Something unique" (4) F. G.
Smith, Sons & Co. \$\frac{3}{2}\$\$ design in
gold. (5) Wright & Kay. \$\frac{3}{2}\$\$ design in
gold. (6) Roehm & Son. \$\frac{3}{2}\$\$ design
in gold. (7) J. L. Hudson. \$\frac{3}{2}\$\$ in
cash. (8) R. H Fyte & Co. —Article not selected. (9) Keenan & Jahn. \$\frac{3}{2}\$\$ glit chair. (10)
McDonald Bros. \$\frac{3}{2}\$\$ Royal Worcester vase. Mrs. John S. Newberry, 483

Mrs. John S. Newberry, 483

Mrs. John S. Newberry, 483

Widow and Orphan's Association,

Mrs. Louis Blitz, 402 Jefferson ave Mrs. Louis Billz, 402 Jefferson ave.
(7) Helping Hand Society, Mrs. Helen
Moore, 55 Edmund Place. (8) Home
for Boys, Mrs. R. C. Faulconer, 57 Watson
st. (9) Home for the Friendless, Mrs. Flora
B. Standart, 30 Edmund Place. (10) Home of

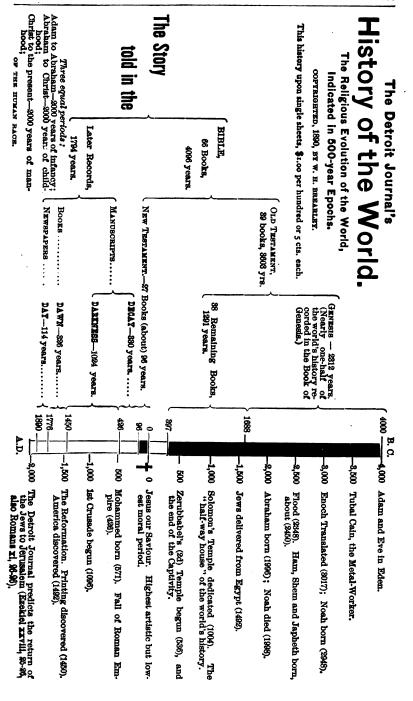
#### ADDITIONAL POST OFFICES, CONTINUED FROM PAGE 80.

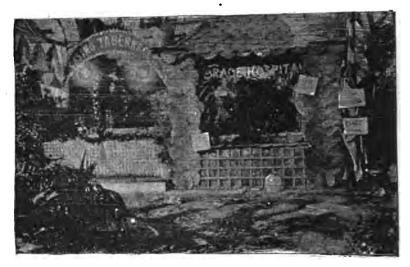
Ottawa-Harrison; Saginaw-Burt. Foster's, Galloway; Sanilac—Juhl; St. Clair—China, Elliott, Grand Pointe, Kimball, Star Island: St. Joseph—Findley: Van Buren—Toquin; Wayne—Claireview; Wexford—Farnsworth. Changes: Brockway Centre to Yaie, Caik-insville to Rosebush. Creel to Owendale, Groverton to South Lake Linden, Kimbal to

Kimball, Munising to Gogarnsville, Owens to

McBain, Point au Frene to Raber, Pipestone Station to Hartman, Sandusky to Sanilac Centre, Van Zile to Kitchi, Whitewood to Highland Park, Lennon from Genesee to Shiawassee Co.

Discontinued: Appleton. Beaser, Bedford Station, Colfax, Conger, Esmond. Giddings, Ottawa Beach, Parkinson, Pleasant, South Riley, Stover, West Detroit, Whipple.





GRACE HOSPITAL AND CASINO TABERNACLE BOOTES.

#### The Greatest Triumph.

From a thoughtful resume of the 1889 floral festival, made in a letter of S. G. Howe's, last April, these sentiments stand forth in an especially pleasing light, in view of the earnest work that is now being done for the 1890 flower show. "The spirit of fraternity exhibited in that great success was the greatest triumph of all. Grand as was the artistic display of flowers and the bevy of beauty, the simple and earnest good fellowship surpassed both, and was one of the most powerful signs of the times."

#### The Floral Booths and Rooms.

The Detroit Journal intended to present in this Year-Book, a perfect picture of each of the 21 booths of the 1899 Floral Festival, but on investigation, it was found that the negatives from which the pictures of flowers and beauty at the flower show last April were made, were not prepared with a view to this kind of reproduction, and so all but a very few were unavailable for these pages. No one can more regret than does The Detroit Journal, that the 1890 Year-Book can not show as first intended, an engraving of every booth and room at last year's Floral Exhibition.

The negatives were made by Holcombe & Metzen, and afforded excellent photograph souvenirs of the exhibition, but were unfortu-

nately not well adapted to the process of halftone photo engraving.

The illustration above and on the following left hand pages, will give a partial idea of what was intended, and although unsatisfactory, they will help recall to those who attended it, some of the scenes of the last exhibition. It is almost needless to say that The Determination of the scenes of the last exhibition. It is almost needless to say that The Determination of the scenes of the satisfactory negatives, for this express purpose, are made during the approaching festival, and that they will be shown in the Year-Book for 1891 without any accompanying apology. These views (all that were found good enough to be used at all) are not arranged with any attempt at preference.

POOR RICHARD'S WISE WORDS.

The used key is always bright.
God gives all things to industry.
One to-day is worth two to-morrows.
He that lives on hope will die fasting.
Who dainties love, shall beggars prove.
A little neglect may breed great mischief.
Fools make feasts, and wise men eat them.
Tis hard for an empty bag to stand upright!
Keep thy shop, and thy shop will keep thee.
Creditors have better memories than debtors.

Pride that dines on vanity sups on contempt.

Sloth, like rust, consumes faster than labor wears.

We may give advice, but we cannot give conduct.

Many have been ruined by buying good bargains.

If you would have your business done, go; not send.

Drive thy business! Let not thy business drive thee!

# The Detroit Journal

CIRCULATES DAILY

# OVER 22,000 COPIES,

Reaching every portion of the City of Detroit, and the State of Michigan.

Four pages except Saturdays, 8 pages on Saturday. Eight columns to the page, width of column 12 ems pica, length 21½ inches.

#### ADVERTISING RATES.

Basis of Measurement. -Solid agate, 14 lines to the inch.

All cuts must be blocked on solid metal base.

#### DISPLAY ADVERTISING.

(Time Contracts.)

1 inch.	FIRST PAGE,			Pa	GE 4, 5, o	Pub. Option.			
Times.	Per Line.	Per Inch.	Amount.	Per Line.	Per Inch.	Amount.	Per Line.	Per Inch.	Am't.
1 2 6 12 26 52 104 156	8 7 1-2 7 6 1-2	1 75 1 50 1 25 1 12 1 05 98 91	\$ 2 00 3 50 9 00 15 00 29 12 54 60 101 92 141 96	6 1-2 6 5 5-7 5 5-14	1 25 1 15 1 00 91 84 80 75	\$ 1 50 2 50 6 90 12 00 23 66 43 68 83 20 117 00	5 1-2 5 4 5-7 4 1-2	1 00 90 80 77 70 66 63	\$1 25 2 00 5 40 9 60 20 02 86 40 68 64 98 28

Less than one inch 10 per cent extra.

#### Discounts for Space on Time Contracts.

70 lines, ( 5 inches) Each insertion, 5 per cent, 140 " (10 " " " 10 " "

#### GUARANTEED POSITIONS.

Next to reading matter only, or top of column only, - 15 per ct. extra.

First following or top of column next reading matter, 25 " "

Set in reading matter type, without display. - - 50 " "

#### SPACE CONTRACTS.

Space to be used within one year.

	First Page.		Page 4,	5, or 8.	Pub. Option.		
1,400 lines ( 100 in.),	at 9c.	\$ 126 00	at 7c.	\$ 98 00	at 6c.	\$ 84 00	
4,200 lines ( 300 in.),	at 71/2c.	815 00	at 6c.	252 00	at 5c.	210 00	
7,000 lines ( 500 in.),	at 7c.	490 00	at 51/6c.	385 00	at 436c.	326 67	
10,500 lines ( 750 in.),	at 63/4c.	700 00	at 51/8c.	560 00	at 416c.	472 50	
14,000 lines (1000 in.),	at 61/3c.	886 67	at 5c.	700 00	at 414c.	595 00	
21,000 lines (1500 in.),	at 6c.	1260 00	at 49/4c.	997 50	at 4c.	840 00	

#### READING NOTICES, Count.

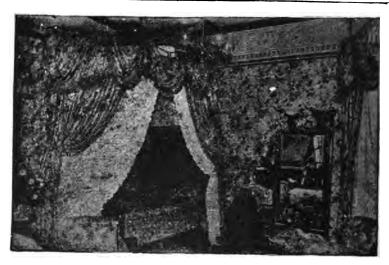
One insertion, per line, - - 40 cts | 500 lines, at 30 cts. - - \$150 00 100 lines, at 35 cts. - - \$250 00

#### SPECIAL NOTICES, Count.

One insertion, per line, - - 20 cts. | 1500 lines, at 121½ cts. - - \$187 50 500 lines, at 15 cts. - - \$300 00 lines, at 10 cts. - - 300 00

#### NON-DISPLAY ADVERTISEMENTS.

"Liners" (Wants, For Sale, etc). Marriage, Death and Meeting notices, 10 cents each insertion of 14 words or less, and ½ cent per word for each additional word. Nothing counted less than 14 words.



GAMBLE & PARTRIDGE'S ROOM.

#### A Rhyme of Rest.

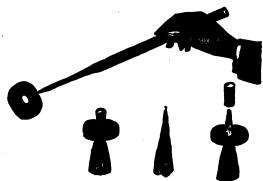
"The land of nod, Whose slumber-god Invites us to repose. Is here, in truth, While dreams of youth Await, tired lids to close."

So wrote the weary rhymster, as his eyes rested on Gamble & Partridge's dainty French cretonne chamber at the 1889 floral restival.

# PORCELAIN + DENTAL + ART.

## The New Process

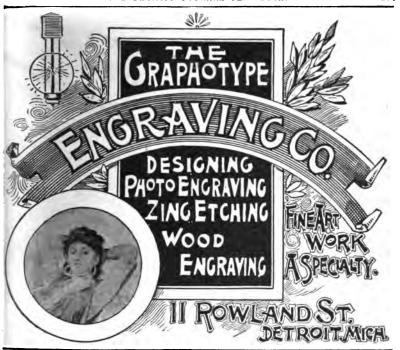
Of Restoring Decayed and Defective Teeth to their original appearance in shape, size and color. Undeveloped Teeth can be enlarged to their proper size and made to appear perfect. Old roots can have Artificial Crowns attached to them, and when made to antagonize become as useful as ever. Large and conspicuous gold fillings can have Porcelain Sections placed over them, and thus hide their glaring appearance. Devitalized teeth that have become discolored can have an artificial coat of enamel placed over them, and be so thoroughly renewed in appearance that the art is concealed, by C. H. LAND.



A neat pamphlet of 40 pages, containing a complete and comprehensive description of the most important and valuable improvement in modern dentistry. Illustrated. Send 25 cents in stamps and a copy will be sent by mail. Address

# DR. C. H. LAND, 264 Woodward Ave., DETROIT, MICH.

P. S.—This pamphlet is designed to place before the public the exact manner of manipulating the work, so that they may be better able to comprehend its great value. Dr. Land devotes his entire time and attention at the chair, making a specialty of technical operations. People who live at a distance can secure appointments by correspondence. Also the best of references from those who have had difficult operations performed will be furnished. By the aid of these improvements the Dentist can afford to produce a very high degree of artistic work for less than half the usual cost of the old and inferior methods, and warrant operations for ten years.



# DETROIT LITERARY BUREAU.

BOOKS AND PAMPHLETS WRITTEN OR COMPILED, OR ESSAYS, SKETCHES, DESCRIPTIVE ARTICLES, HISTORIES, BIOGRAPHIES, ETC.
MANUSCRIPTS READ AND OPINIONS GIVEN.

WRITINGS PREPARED FOR THE PRESS.
PROOFS READ OR REVISED.
BOOKS INDEXED.

Addresses and lectures given.

Nothing prepared for another to present as his own. Write for testimonials and list of books to HENRY A. FORD.

No. 393 Second Ave., DETROIT, MICH.

M.W. O'BRIEN, Pres. ANTON PULTE, V-Pres. F. A. SCHULTE, 2d V-P. S. B. COLEMAN, Cashier

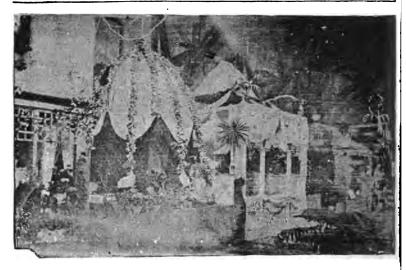


Paid-up Capital, \$500,000 Surplus, . . 100,000 Stockholders Liable for an Additional, 500,000

A Savings Book Issued and Interest at 4 per cent. allowed on deposits of One Dollar and upwards.

Letters of Credit furnished. Drafts for sale on all the Countries of the Old World in sums of £1 and over.

S. W. COR. FORT AND GRISWOLD STS.



HEBREW WIDOW AND ORPHAN SOCIETY AND ST. LUKE'S HOSPITAL BOOTHS.

#### "An Unqualified Success."

The flower show held in the rink was visited by thousands, and was the best arranged and most successful undertaking ever carried out in Detroit. The interior of the building presented a wealth of floral magnificence. The different booths, representing the various charities, were exceedingly pretty, and attracted everybody's attention. Besides affording the people of the State a feast of loveliness, it will contribute a very large sum to charitable purposes.—Detroit Courier, April 6, 1839.

# <u>ADAMANT</u>

# WALL PLASTER

# HAS COME TO STAY.

T makes a wall hard as marble; it saves all "waiting for plaster to dry."

It can be put on complete from 23c. to 35c. per yard. Never mind what you hear about it. Come to the office and satisfy yourself. Come in and hit it with a club. We will put it on a room, and if it's not just what we claim we'll make no charge. 20,000 buildings plastered with adamant last year. No more falling ceilings. No more broken walls and defaced decorations. Adamant is on top.

# Detroit Adamant Wall Plaster Co.

88 Griswold Street.

Factory Foot 21st St.

In MEDICINE, quality is of the first importance at
HENRY J. MILBURN'S,
Progressive Druggist,
and Dealer in Surgical Instruments,
Sick Room and Nursery Supplies.
81 WOODWARD AVENUE, DETROIT.

### A RHYME OF THE FARE.

7

On the cars for business,
On the boats for pleasure,
Many thousand people
Yearly spend some leisure.
As the miles go whizzing
Away with magic touch,
Most of them are wishing
It did'nt cost so much.

There's one man so posted
On every railroad's ways,
He's been commissioned agent
For lo! these many days.
He can save you money,
And great cut rates show, sir,
Just call on H. D. SMITH,
When out of town you go, sir.

Don't forget the maxim,
"Economy is wealth," sir;
Would you take a journey,
Seeking for your health, sir?
Do you fear that you will
Money sadly lack?
Go, see Smith at "The Griswold,"
Or the "Hotel Cadillac."

MY MOTTO:

# BEST ROUTES and LOWEST RATES.

Telephones 2181 and 1228.

Member American Ticket Brokers'
Association.

# W. H. SWAIL,

# JOB PRINTER.

28 CONGRESS STREET WEST.

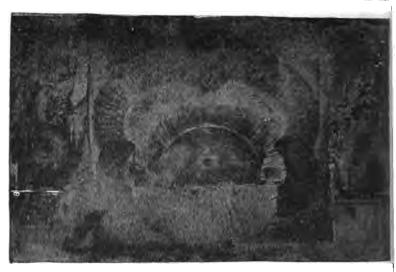
•• For Sale' and "To Rent' Cards
FOR SALE.

COMMERCIAL PRINTING
A SPECIALTY.

▲ Line of LAW BLANKS always in Stock.

Low Prices.

Wedding Invitations, Announcements, and Cards, Bills of Fare, Programmes, etc., neatly printed at reasonable rates.



OPEN DOOR SOCIETY. PANSY BOOTH,

#### Pansy Thoughts.

The ladies of the Protestant Orphan Asylum offered an afghan to the booth receiving the greatest number of votes as being the handsomest. At the last of the spirited contest an admirer of the Open Door (pansy) booth came to its assistance with 200 votes the winning the afghan for it. The ladies at once presented it to Mr. L. W. Partridge, in appreciation of the services of Gamble & Partridge in connection with their beautiful booth. Their French decorator, combined with the Edison Illuminating Co's. lighting of the great pansy, made the purple and yellow radiance supreme.

## EDISON Leads the World in ELECTRICITY.

DECORATED AT PARIS AS THE ORIGINAL INVENTOR OF THE

## ----INCANDESCENT ELECTRIC LAMP.

THE EDISON is the ONLY SAFE Electric Light. Beware of the "Deadly Alternating" Incandescent, which is far more dangerous than the Arc-Light.

# The Edison Illuminating Company,

OF DETROIT.

Corner State Street and Washington Avenue.

Telephone 1440.

# Incandescent Electric Lights Electric Power

Supplied from LOW TENSION, Underground Circuits without danger from Fires or Shocks,

ELECTRIC POWER FOR ELEVATORS A SPECIALTY.

OFFICERS AND DIRECTORS:

E. W. VOIGT, Vice-Pres. HOYT POST, Attorney. C. P. GILBERT, Sec'y and Magr.

S. R. Mumford, Trees. ROBT. McMillan. F. S. Hastings,

GEORGE PECK, Pres't. S. J. MURPHY. GEO. F. MOORE.

# Gamble & Partridge,

### THE NEW CARPET HOUSE,

Entering on their Second Year, herewith call your attention to a few brief facts:

- 1. We are the only Exclusive Carpet House in Detroit, and devote our whole time and attention to this business in all its branches, and can therefore guarantee satisfaction in every particular.
- 2. We carry the choicest, largest and most carefully selected line of Carpets, Rugs, Mattings, Curtains and Draperies. We invite your inspection.
  - 3. Goods Strictly First-Class, and at the Lowest Possible Prices.

+ + +

### DEPARTMENTS.

- CARPETS.—Carpets of all grades and varieties. We make special mention of our Work Department in this connection, experience proving to us that to give satisfaction it is necessary that the work should be done in a perfect manner. THIS WE GUARANTEE.
- CURTAIN, DRAPERY AND UPHOLSTERY. Every NOVELTY in this line we carry and sell at LOW PRICES.
- RUGS.—In this Department will be found a complete assortment of DOMESTIC, TURKISH, PERSIAN, ENGLISH AND JAPANESE RUGS.
- MATTINGS.—CHINA, JAPANESE and INDIA MATTINGS in all grades. "Mattaline," the Greatest Invention in this line, being made of CHINA STRAW on a strong string warp, making the most durable and desirable Matting ever made, only to be had at our Store.
- JAPANESE DEPARTMENT.—In this line will be found many useful as well as ornamental Household Goods, at the low prices for which the JAPANESE PEOPLE are famous.

+++

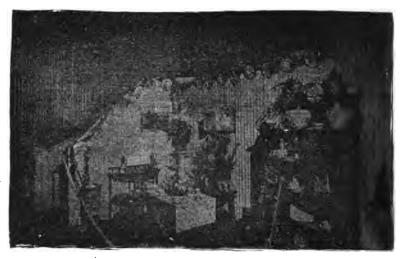
### SPECIAL.

Our **Drapery and Upholstery Work** is designed and executed by MR. A. E. BLANC, formerly with the largest and best houses of Paris and New York City, and his original designs need only inspection to be approved.

Give us a trial—that is all we ask.

## Gamble & Partridge,

219, 221 and 223 Woodward Ave., DETROIT, MICH.



King, Klugh & Co.-Floral China Ware,

#### A Novel Undertaking.

The flower show has proved a great success. It was a novel undertaking, and Mr. Brearley, who conceived it, and all who have aided him in his indefatigable labors, are entitled to the thanks of the public.—Detroit Tribune, April 6, 1889.

A tropical scene of surpassing loveliness is presented at the Detroit rink. The entire floor of the rink is covered with potted plants and shrubs. The effects produced by the booths are strikingly fine.—Detroit Free Press, April 2, 1889.

# King, Klugh & Co.,

Importers and China Merchants,

CHOICE WARES FROM ALL COUNTRIES.

FINE FRENCH AND ENGLISH PORCELAINS

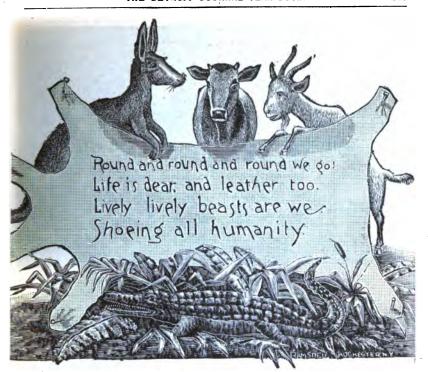
CUT GLASS.

Crockery of all Grades from Cheapest to Finest.

Table, Banquet and Piano Lamps.

White China for Decoration a Specialty.

-103 Woodward Avenue.-



# REMOVAL!

Having bought the entire manufacturing business, machinery, lasts, dies and patterns, and lease of building of the late firm of

### H. S. ROBINSON & BURTENSHAW,

We have removed our offices, store, cutting and fitting rooms to their recent location,

Nos. 65, 67 and 69 Jefferson Avenue,

Cor. of Cass Street, where we will be pleased to see our friends and customers. We will continue to occupy our factory, 12, 14, 16 and 18 Atwater Street, cor. of Griswold Street, for sole leather cutting and bottoming rooms.

# PINGREE & SMITH,

Manufacturers of Reliable Footmear,

LADIES', GENTS', MISSES', BOYS' and CHILDREN'S. All Styles

DAILY CAPACITY 3,000 PAIRS. \_#



#### Protestant Orphan Asylum Booth.

#### Floral Magnificence.

If you were blindfolded on Woodward avenue and led to the Detroit rink, it would not strain your imagination in the least to picture yourself in fairy land. Such a labyrinth of floral magnificence, rare foliage and such a profusion of potted plants were never seen in Detroit before. The results of good management and hard work are seen in a practically perfect exhibition.—Detroit Evening News, April 2, 1889.

#### State Agents for the Celebrated

Vacheron & Constantin

-Watches.



## **OPTICAL BUSINESS**

A SPECIALTY.

Eyes accurately fitted by Scientific Opticians.

## Manufacturing Jewelers

AND DEALERS IN

## Diamonds,

Watches,

Jewelry,

And Art Goods.

271 Woodward Ave., Cor. Grand Circus Park, NEW WHITNEY BUILDING.

DETROIT.

 $\mathbf{MICH}$ .

HE beautiful and elaborate design which adorns the cover of

G. H. DURSTOR.

this book is a sample of the artistic work of

LITHOGRAPHER AND ENGRAVER, BUFFALO, N. Y.

NOOTHER Life Policies as liberal cost as little money, no others as cheap give as much for the money, as those of

# THE TRAVELERS

## OF HARTFORD, CONN.

Best either for Family Protection or Investment of Savings. Non-forfeitable, world-wide, lowest cash rate.

THE TRAVELERS is also the Oldest, Largest and Most Successful Accident Insurance Company in the Country.

Low Rates, Liberal Contract, New Features, Ten Premium Endowment Accident and Ten Premium Accident Policies.

All claims paid without discount upon receipt of satisfactory proofs.

Claims Paid,	over		-	-		\$17,000,000.00
Cash Assets,	-	-		-	-	11,000,000.00
Surplus.	-	<u>-</u>	-	_		2,250,000,00

JAS. G. BATTERSON, President. RODNEY DENNIS, Secretary.

JOHN E. MORRIS, Asst. Secretary.

## J. W. THOMPSON, State Agent,

FOR MICHIGAN AND INDIANA.

44 Campau Building, -- Detroit, Mich.



BETHEL BOOTH.

### A Wish That Has Been Realized.

The flower show which occurred April 2-5 at Detroit was remarkably successful financially, and the floral display was certainly excellent, especially for a first attempt—this being Detroit's first floral exhibition. It is to be hoped it proved so attractive that regular annual exhibitions will be the result.—The American Florist.

## The Banner Year of the Banner Company.

The Forty-fourth Annual Report of the NEW YORK LIFE, for the year ending January 1st, 1889, shows:

- AN INCREASE of over half a million dollars in Interest Receipts, over the figures
- of 1887.

  AN INCREASE of nearly one and a half million dollars in Benefits to Policy-holders.

  AN INCREASE of over one and a half million dollars in Surplus for Dividends, over
- January 1, 1888; 4. AN INCREASE of over two and a half million dollars in Premiums, over the figures
- of 1887
- of 1887; AN INCREASE of over three million dollars in Annual Income, over the figures of 1887; AN INCREASE of over ten million dollars in Assets, over the figures of Jan. 1, 1888; AN INCREASE of over eighteen million dollars in Insurance Written, over the figures
- AN INCREASE of sixty million dollars in Insurance in Force, over the figures of

- January 1, 1888; 1888, OF OVER TWENTY-FIVE MILLION DOLLARS;
  9. A TOTAL INCOME, IN 1888, OF OVER TWENTY-FIVE MILLION DOLLARS;
  10. ASSETS, JANUARY 1, 1889, OVER NINETY-THREE MILLION DOLLARS;
  11. NEW INSURANCE WRITTEN, IN 1888, OVER ONE HUNDRED and TWENTY-FIVE MILLION DOLLARS;
  12. INSURANCE IN FORCE, JANUARY 1, 1889, NEARLY FOUR HUNDRED AND TWENTY MILLION DOLLARS.

In the amount of business done, and in the magnitude of the increases over former years, the year 1888 was the "Banner Year" of the Company. In the variety, extent and proportional uniformity of these increases, we believe the New York Life will be found to be the Banner Company of the world.

Why should you not be a member of this Wonderful Company?

C. W. MOORE, Manager, DETROIT.

# HEALTH FOODS.

In the effort to meet the necessities of a large Sanitarium, with its great variety of patients, we have produced a number of food preparations adapted to different diseased conditions, the merits of which are such as to secure for them a very large and increasing sale, not only to persons belonging to the invalid class, but those who wish by "good living" to avoid disease. The following are the leading preparations.

Cents per		· Cents per	lb.
Oatmeal Biscuit,	12	Rye Wafers,	
Medium Oatmeal Crackers,	10	Fruit Crackers, 2	20
Plain Oatmeal Crackers, .	10	Carbon Crackers,	15
No. 1 Graham Crackers, .	10	Wheatena,	12
No. 2 Graham Crackers, .	10	Avenola,	12
Plain Gr'h'm Cr'ckers, Dyspeptic,	10	Granola,	12
White Crackers	10	Gluten Food,	40
Whole-Wheat Wafers, .	12	Infant's Food,	
Gluten Wafers,	<i>30</i>	White Gluten Food,	

# Sample Packages containing Specimens of each of our Foods sent postpaid for 50c. Selected Samples, 25c.

All grain preparations can be supplied in large or small lots, as we keep a fresh supply constantly on hand of goods, which are largely made expressly for us, of a superior quality of grain.

Address for descriptive circular,

## SANITARIUM FOOD COMPANY,

BATTLE CREEK, MICH.



CENTRAL SEED WAREHOUSE OF D. M. FERRY & Co., DETROIT, MICH.

Detroit has reason to be proud of many of her great institutions, and this may certainly be said concerning D. M. Ferry & Co., whose immense building is represented above. This elegant and commodious structure occupies the site of their old building, Brush, Croghan and Champlain streets, which was burned Jan. 1, 1888. This Company do the largest seed business of any concern in the United States, and are steadily increasing their trade, which now covers almost every State and territory in the Union.

## HARRAH'S REAL ESTATE EXCHANGE,

103 AND 105 GRISWOLD STREET.

Telephone 2003.

DETROIT, MICH., January 1st, 1890.

### TO OWNERS OF REAL ESTATE.

WE HAVE UNEQUALLED FACILITIES FOR THE DISPOSAL OF PROPERTIES OF ALL KINDS. OUR OFFICE IS CENTRALLY LOCATED, WE ADVERTISE EXTENSIVELY, OUR WORKING STAFF IS THE LARGEST OF ANY REAL ESTATE FIRM IN THE CITY, AND WE HAVE AS MANY, IF NOT MORE, CUSTOMERS AND ENQUIRIES FOR PROPERTIES IN AND OUTSIDE OF DETROIT THAN ANY OF THE OTHER LEADING AGENTS. WE AFFORD OUR CUSTOMERS FREE ADVERTISING, AND MAKE NO CHARGE OF ANY KIND FOR SERVICES UNLESS A SALE IS EFFECTED.

#### TO BUYERS OF REAL ESTATE.

OUR LISTS COMPRISE PROPERTIES OF NEARLY EVERY CLASS, AND IN DETROIT ALMOST EVERY LOCALITY IS THEREIN REPRESENTED. WE ARE OFFERING SOME VERY DESIRABLE MANUFACTURING SITES WITH RAILWAY AND RIVER FRONTAGES, ALSO SOME CHOICE ACRE TRACTS (BOTH SMALL AND LARGE), FOR SUBDIVISION, SOME OF THESE ARE DECIDED BARGAINS. WE HAVE A LARGE NUMBER OF FARMS, SOME VERY CHOICE ONES. ALSO IMPROVED AND VACANT PROPERTIES IN OTHER CITIES, TOWNS AND VILLAGES. SEND FOR OUR PAMPHLET.

C. W. HARRAH.

1843

THE

1890

# Mutual Life Insurance Co.

OF NEW YORK.

RICHARD A. McCURDY, President.

ASSETS.

\$135,000,000.00

STANDS FIRST IN RANK AMONG FINANCIAL INSTI-TUTIONS IN THE WORLD.

# The Largest, Safest and Best Company

IN THE WORLD.

THE FINANCIAL RESULTS obtained by the MUTUAL LIFE INSURANCE COMPANY have never been equalled by any other Company. It has paid its policy-holders since organization nearly \$300,000,000.00, and has now on hand over \$60,000,000.00 more than has been received in premiums, which sum has been earned by judicious investments.

We call attention to the new LIFE OPTION ENDOWMENT CONTRACT, which in addition to insurance gives the policy-holder a guaranteed income of 4 per cent. for Life after maturity.

Its policies are simplicity itself, no restrictions of any kind.

The history of the Company is such that the policy-holders can point to its record as a guarantee for the fulfillment of its promises.

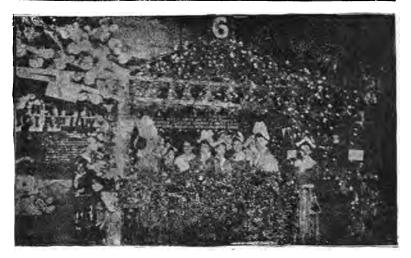
For further information please call on or write to

## FERGUSON & GRANT, Gen'l Agents,

For Michigan, Indiana and Wisconsin,

HUGO BOETTCHER, Special Agents for Detroit.

Detroit, Mich.



HELPING HAND SOCIETY. SWEET PEA BOOTH.

The Star Prophecy.

The Cadillac News and Express proved a true prophet when it published: "A Star Success. Down at Detroit such terms as jonquils, h4 drangea, narcissus, rhododendron, etc., are heard between plays at progressive euchre parties, and discussed after the benediction. That flower show will be a star success, see if it isn't; for the Journal originated the show, and anything that it stands sponsor for is guaranteed to go."—Cadillac News and Express.

# OHIO FARMERS INSURANCE CO.

LE ROY, OHIO.

CHARTERED 1848.

Cash Assets. 1890. over \$1.500.000.00

N. A. BIERCE, Agent,

30 Congress Street West, DETROIT.

E. A. HOUGH, State Agent, Jackson, Mich.

# FINE PHOTOGRAPHS.



C. G. WYNN & CO.,

Studio, 242 Woodward Ave.

UR PHOTOGRAPHIC WORK, IN ALL STYLES AND SIZES, CANNOT BE EXCELLED.

PORTRAITS IN CRAYON,
WATER COLOR AND PASTELLE.
ARTISTIC WORK IN ALL BRANCHES.

# "DAIRY LUNCH."

98 and 100 Woodward Avenue.

## CRAWFORD'S

Tables Reserved for Ladies.
Parcels Cared for Free of Charge.
Toilet Rooms for Ladies.

THIS IS THE ONLY "DAIRY LUNCH" IN DETROIT.

MASON & RICE,
ARCHITECTS,

80 Griswold St.

# CAFÉ SWAN,

87 Woodward Ave.

BRANCH: 226 & 228 West Woodbridge St. (Opposite Mich. Central R. R. Depot), **DETROIT.** 

Popular Business Men's Lunch.
DINNER: 11 A. M. TO 3 P. M.

The long established excellence of service always maintained, and seasonable delicacies prepared to order by our experienced "Chef."

SWAN & CO., Cor. Woodward Ave. and Larned St.,
DETROIT, MICH.



ROEHM & SON'S ROOM.

#### Floral Ornaments.

Among the many unique exhibits at the Detroit Flower Show was one of floral jewelry, an especially appropriate collection for the time and place. The natural flowers, when placed beside these delicate imitations, found their tints and textures fairly rivaled, and R. J. F. Roehm & Son found their display a center of attraction.

FINE JOB PRINTING A SPECIALTY.

BLANK BOOKS.

\*EDITION BINDING.



152-154-156 WAYNE STREET.

NEAR NEW POST OFFICE SITE.

<u>1847</u>

THE

1890

# Canada Life Assurance Company

A. G. RAMSAY,

President and Managing Director.

Assets, \$10,000,000.

Surplus, over \$1,700,000.

Deposited with State Treasurer of Michigan \$100,000 in U. S. Bonds.

Ranks among the Best Financial Institutions in the World.

The low rates and large profits bring insurance that insures within the reach of all.

Our 10, 15, or 20 payment 20 year Tontine policies are better than government bonds or mortgages: free from taxes and cannot be taken for debt. Write for particulars.

Men that have succeeded, or think they can succeed as canvassers, can find profitable employment by calling on, or addressing

## H. A. HOLMES,

Manager and Attorney for Michigan.

#### RESIDENT BOARD OF REFERENCE:

Hugh McMillan, Detroit, Bruce Goodfellow, Detroit, Capt. Jas. W. Millen, Detroit, Pres. Com'l Nat'l Bank. Pres. Mabley & Company. Mngr. Detroit Transp't'n Co.

W. K. Muir, Detroit, Frederick Fayram, Detroit, Col. A. T. Bliss, East Saginaw,
Pres. Eureka Iron Works. Sec.-treas. Detroit Free Press Co. Member of Congress



HOME FOR THE FRIENDLESS BOOTH.

#### Unique and Original.

THE DETROIT JOURNAL has invented more schemes and conducted them to successful termination in the past two years than any other paper in the State. The latest was the Detroit flower show, gotten up in the interests of the city charities. It was unique and original, and enlisted lovers of the beautiful in general and the ladies in particular. Detroit business houses, railroads, hotels, and theatres, as well as the charities, shared the benefit.—Mt. Clemens Press, April 12, 1889.

## BREARLEY'S IMPROVED CHURCH PLANS.

By arrangement with W. H. Brearley, of Detroit, Mich. (the designer of these plans), the American Baptist Publication Society become the sole agents, and all orders should be addressed to them.

Each of these Plans consists of a full set of working drawings, architect's specifications, and builder's bill of material. They are ready to be put in the hands of a builder at once.

Any architect would charge \$75 for a set of drawings that are no more complete. Either of the designs given below can be procured for \$6. The plans are copyrighted, and must not be copied without permission. The \$6 charged for right to use is for each building upon this design. PRICE OF ONE SET WITH RIGHT TO USE, \$6.

#### IN ORDERING STATE WHICH PLAN IS DESIRED.

Design 1, Frame, Seats about 225, Costs about \$1,500

••	<i>z</i> ,	••	••	300,	••	••	<b>z</b> ,000
44	3, "	44	44	325,	• 6	66	2,500
"	4, "	66	66	450,	66	"	3,500
66	5, Brick	46	66	400,	66	46	7,000

Any one of the five designs will be sent for examination for \$1.00, the design to be returned if not used. If adopted, \$5.00 additional must be paid for the right to use,

We are pleased with the plan of these designs, and believe they can be made very helpful to churches desiring to build good houses of worship. The plans are cheaper than those of an architect drawn for a special church.—Religious Telescope, Dayan those of an architect drawn for a special church.—Religious Telescope, Day-no, O.

The plan is attractive, unique, economical

The plan is attractive, unique, economical

The plan is attractive, unique, economical

Mirror, Portland, Me. ton. O.

of space, and cheap of execution.—Presby-terian, St. Louis.

The plan is good.—Christian Messenger, Halifax, Nova Scotia.

## DO YOU USE

FLOUR?

If so, always order it

**JNE-STAVE** 



Tour Barrel

WITH COMBINATION HOOPS (STEEL AND WOOD).

Odorless, Air-Tight and Exact in Size and Shape.

HUGO MATTULLATH, Pres. Cass. G. ROBINSON, Sec.

Manufactured by the ANCHOR MANUFACTURING CO., Detroit, Mich.

OFFICES, Nos. 44 & 45 Buhl Block.—NEW YORK OFFICE, 94 Wall Street.

HAVING the largest fire-proof cooperage plant in the world. Covers 53 acres of property, one and one-eighth miles of water front, and one and a half miles of railroad side-tracks. Have eleven engines working 1,200 horse power. Manufacture flower, sugar and coffee barrels; all sizes. Also nail kegs. Maximum capacity 18,000 barrels, 18,000 sets of heading, and 200,000 hoops per day. The most important improvement ever made in cooperage. Pronounced by millers of national reputation "the best barrel ever made for flour," the strongest, tightest, handsomest. The only barrel thoroughlythn-dried; therefore especially adapted for storing, and shipment to hot climates. The hoops, bound with tough steel wire of enormous strength, are so secure that claims for cooperage or leakage are unheard of under ordinary conditions. Worth an extra price at second-hand to cracker manufacturers, or wherever merit is considered. Will stand piling up and hard usage better than the old style. Flour ordered in these barrels FEGMETLY FILLED AT EXCULAR PRICES.

## Who was your Great Grandfather?

The Detertoit Journal desires to receive, by postal card, the address of all living male and female descendants of Revolutionary officers and soldiers of 1776, and, when possible, the name and State of the ancestor.

Send reply on postal cards to

W. H. BREARLEY.

Detroit Journal.



#### THE WAYNE.

One of the evidences of the growth of Detroit and of its now metropolitan character, is the maintenance of a first-class hostelry as far from the former business centers as is the WAYNE. This now well-known house is located directly opposite the Michigan Central depot and has a whole block frontage on Third Street. The WAYNE was opened to the public Dec. 1st, 1887, a magnificently furnished hotel with all the modern conveniences.

## ANSCOMB & REAUME,

Suite 45 Campau Building,

## Real Estate Brokers

Vacant and Improved Property for sale in all parts of the city.

Owners and Agents of Henderson & Griffiths' Subdivision, located on Michigan and Griffiths Avenues.

## LOTS RANGE IN PRICE FROM \$100 TO \$300.

\$10 down, balance \$5 per month.

Be sure and call on us before buying elsewhere. Our carriage is always at the door, and it is no trouble to show our property.

TELEPHONE 1150.

# THE ONLY WAY TO GET A COPY OF THE



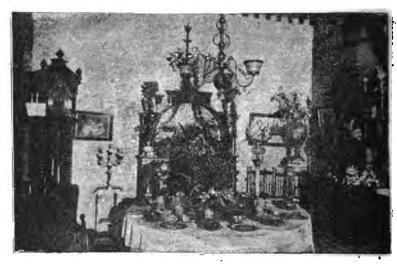
IS TO

## Subscribe for THE DETROIT JOURNAL,

And it will be given to you

≈ FREE OF CHARGE ≈ FREE

FIT IS NOT FOR SALE.



BREITMEYER'S ROOM.

#### Gone, But Not Forgotten.

The ladies and florists, though weary and worn, planned to make the last day—and the "extra" one—the best of all. Breitmeyer distributed free all of his flowers among the booths the last night, and received a vote of thanks from the ladies for his kindness to them. As the flower show was officially closed, it was said "The flower girl dies, but never surrenders."—Extracts from the Detroit Free Press and Evening News.

## JOHN BREITMEYER & SONS.

## Florists

Popular Flowers in their Season.

PALMS, FERNS AND HOUSE PLANTS. \* \* \* \*

Corner Gratiot and Miami Avenues

### THE MERRITT TYPEWRITER.



Price Complete, \$15.
Send a postal or telephone and we will call and show the machine.

D. L. WATSON, JR., AGENT.
TELEPHONE 1088. 557 Jefferson Avenue.
Bicycles from \$35 to \$135. "Warwick Cycles."

## GAINES'

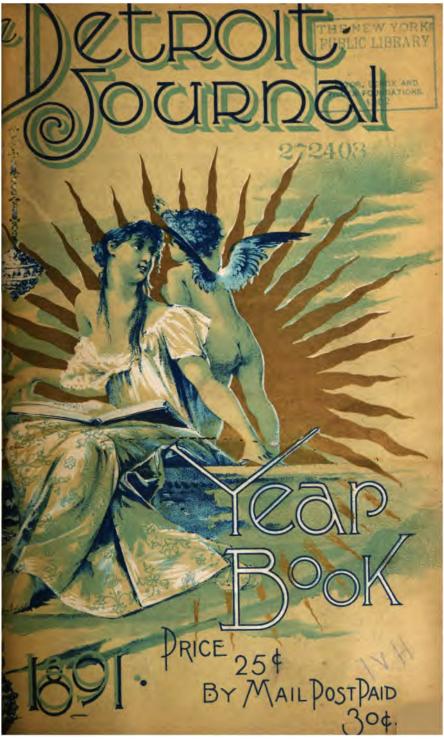
## Dancing Academy,

BARNES' HALL, 207, 209, 211 Woodward Aw

#### CLASSES:

MONDAY, Afternoon and Evening.
FRIDAY, " " "
CHILDRENS' CLASS, Saturday at 2 P. M
PRIVATE LESSONS by appointment.
Special Arrangements may be made
Private Classes at Residences and Semina

TELEPHONE 1102.



# THREE IN ONE.

You would undoubtedly find

if it were npse sucly 25,000 Michigan, JOURNAL necessity. e venture

up these here they at it pays

The homes can bu to read Yo To

Pre

But The

much 1

experi

Presented by

Gen. William O. McDowell,

New York, City.

But C. H. :

Date, May 2nd, 1899.

by the

No.

Shelf,

All

clean home paper, and an evening paper - three in one.

We most respectfully solicit your business.

ind attractive

esire, has

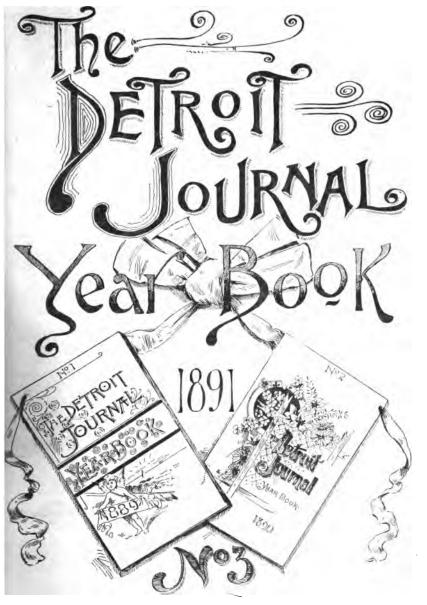
st permanent to the homes musts its sube fluctuating the family vertiser."

e papers; rnal, and, dvertisers

aking a firstse conditions that the evens reason: A saves it at his where he has I the family."

ublicity, a

THE DETROIT JOURNAL CO.



PUBLISHED BY

# THE DETROIT JOURNAL COMPANY, DETROIT, MICHIGAN.

COPYRIGHTED, 1890, BY THE DETROIT JOURNAL COMPANY,

## ASTRONOMICAL CALENDAR FOR 1891.

#### ECLIPSES AND TRANSIT.

"Four eclipses will occur in the year 1891,—two each of the Sun and the Moon,—also a transit of Mercury over the Sun's disk.

, I. Thursday, May 23, a total eclipse of the Moon, invisible on the American Continent, but visible as total or partial in other parts of the world.

II. Saturday, June 6, an annular eclipse of the Sun, visible as a partial eclipse north and west of a line projected from the mouth of the St. Lawrence through Ottawa, Can., Detroit, St. Louis, Dallas, Tex., and Sinaloa, Mex.; and so visible in nearly all parts of Michigan. It will begin in Eastern Michigan at 9:56 o'clock, A. M., local time, and end at 10:34. Only a very small part of the Sun's disk will be eclipsed.

III. Sunday, November 15, a total eclipse of the Moon, visible in North and South America. The Moon enters the shadow at 5:03 A. M., Detroit time; total eclipse, 6:05; middle of eclipse, 6:47; total eclipse ends, 7:29; the Moon leaves the shadow, 8:31. The magnitude of the eclipse will be 1:393, on the Moon's diameter as 1.

IV. Tuesday, December 1, a partial eclipse of the Sun, invisible in North America.

V. Saturday, May 9, a transit of Mercury, invisible in North America, west of Maine and Queb c. Ingress, 6:22 P. M., Detroit time; egress, after sunset.

#### LEGAL HOLIDAYS IN MICHIGAN, 1891.

Thursday, Jan. 1—New Year's Day.
Monday, Feb. 23 (the 22d being Sunday)—Washington's Birthday.
Saturday, May 30—Decoration Day.
Saturday, July 4—Independence Day.
Thursday, Nov. 26—Thanksgiving Day.
Friday, Dec. 25—Christmas Day.

#### SEASONS, 1890-91.

Winter begins Dec. 21, 1890, 3:13 P. M.; lasts 89 days, 40 minutes. Spring begins March 20, 1891, 3:53 P. M.; lasts 92 days, 20 hours, 8 minutes. Summer begins June 21, 1891, 12:01 P. M.; lasts 93 days, 14 hours, 40 minutes. Autumn begins Sept. 23, 1891, 2:41 A. M.; lasts 89 days, 18 hours, 27 minutes. Winter begins Dec. 21, 1891, 9:08 P. M.

The tropical year is in length 365 days, 5 hours, and 55 minutes.

#### MORNING STARS.

A. 6 7 5 4 3 1 1

MERCURY, about Feb. 6, June 5, Sept. 28, VENUS, until Sept. 18. MARS, after July 29. JCPITER, after Feb. 13, until Sept. 5. SATURN, until March 4, and after Sept. 13.

#### EVENING STARS.

MERCURY, about April 18, Aug. 16, Dec. 11. VENUS, after Sept. 18. MARS, until July 29. JUPITER, until Feb. 13. and after Sept. 5. SATURN, after March 4, until Sept. 13.

#### FIXED AND MOVABLE FESTIVALS.

FIXED AND MOVE	IDLE PESTIVALS.
EpiphanyJan. 6	Ascension Day (Holy Thursday)May 7
Septuagesima Sunday 25	Pentecost (Whit Sunday)
Quinquagesima (Shrove Sunday). Feb. 8	Trinity Sunday " 24
Ash Wednesday 11	Corpus Christi " 28
First Sunday in Lent " 15	St. John Baptist (Midsummer Day), June 24
St. DavidMarch 1	Michaelmas DaySept. 29
St. Patrick	First Sunday in AdventNov. 29
Palm Sunday " 22	St. Andrew
Annunciation " 25	St. Thomas
Good Friday " 27	Christmas Day " 25
Easter Sunday " 29	·
Low SundayApril 5	EMBER DAYS.
St. George	Feb. 18, 20, 21; May 20, 22, 23; Sept. 16, 18,



STATE CAPITOL, LANSING.

Corner-stone laid, Oct. 2, 1873; dedicated, Jan. 1, 1879. Length, besides porticos, 345 feet; width, 191 feet; hight of lantern, 265 feet. Cost, about \$1,500,000.

#### First Month.

### JANUARY, 1891.

يا اه	For Michigan		MOON'S PHASES. D. H. M.
Day of Month. Day of Week.	Sun rises. Sun sets.	Moon rises.	Third Quarter 8 4 12 morn.  New Moon. 10 9 24 "  First Quarter 17 0 17 "  Full Moon. 24 6 25 eve.
45 6 7 8 Frit Web 112 Mouve 112 Mouve 112 Mouve 112 Frit 123 145 Frit 120 Tweb 123 125 8 Mouve 125 8 M	7 30 4 40 7 30 4 42 7 30 4 42 7 30 4 42 7 30 4 42 7 30 4 42 7 30 4 47 7 28 4 46 7 28 4 49 7 28 4 50 7 27 4 53 7 28 4 50 7 27 4 53 5 1 7 28 5 5 1 7 28 5 5 1 7 28 5 5 1 7 28 5 5 7 28 5 7	10 52 10 53 10 53 10 54 11 59 3 7 4 17 5 29 6 39 8 413 17 22; 8 41 11 11 1 31 1 3 47 4 55 1 6 42 3 47 4 55 6 42 3 47 4 59 6 42 3 47 4 59 6 42 3 47 4 59 6 42 6 42 6 42 6 42 6 42 6 42 6 42 6 42	Him that overcometh will I make a pillar in the temple of My God. Remember the Sabbath Day, to keep it holy.  The Son of Man is come to save that which was lost.  For My yoke is easy and my burden is light.  The eternal God is thy refuge, and underneath are the everlasting Pray for those who despitefully use you, and persecute you. Ask, and it shall be given you; seek, and ye shall find.  Have peace one with another.  The Lord blessed the Sabbath Day, and hallowed it.  If the blind lead the blind, both shall fall into the ditch.  Justice and judgment are the habitation of Thy throne.  He that is not against us is on our part.  He that humbleth himself shall be exalted.  We have a building of God, a house not made with hands.  Be ye kind to one another, tender-hearted, forgiving one another.  The Lord hath given you the Sabbath.



THE UNIVERSITY OF MICHIGAN, ANN ARBOR.
Founded, 1837; opened, 1841. Medical School organized, 1850; Law School, 1859; 8chools of Homosopathy, Dental Surgery, and Pharmacy, since added. Faculty, about 10; students, about 2,400; libraries, 100,000 books and pamphlets; property, \$1,00,000 James B. Angell, President.

### Second Month.

## FEBRUARY, 1891.

-	1	For	Mich	igan	MOON'S PHASES, D. H. M.
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon rises.	Third Quarter. 1 10 42 eve.  New Moon 8 8 12 "  First Quarter. 15 0 29 "  Full Moon 23 1 48 "
12334567890112314567189011223245678	Tu We Th Fri Sat S Mo Tu We Th Fri Sat S Mo Tu We Th Fri Fri Fri Fri Fri Fri	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5 144 5 155 189 5 189 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20	1 57 3 6 4 15 5 21 6 21 8 ets 6 14 7 34 8 51 10 6 11 20 mor 0 31 1 40 2 46 3 47 4 41 5 28 6 26 7 36 8 36 7 36 8 36 7 38 8 37	I have blotted out, as a thick cloud, thy transgressions. Come, take up the cross, and follow Me.  Thy faith hath saved thee; go in peace. They that wait upon the Lord shall renew their strength. They that sow in tears shall reap in joy. Observe the Sabbath for a perpetual covenant. The eye of the Lord is upon those that fear him. We are more than conquerors, through him that loved us. Love your enemies; bless them that curse you. Ye shall be hated of all nations for My name's sake. The Lord is round about his people from henceforth, even forement in the fear of the Lord shall be a light unto me. There shall be to you an holy day, a Sabbath of rest. Show me thy ways, O Lord; teach me thy paths. Be thou in the fear of the Lord all the day long. In all thy ways, acknowledge Him, and He shall direct thy path. No good thing will He withhold from those that walk uprignly. He shall reward every man according to his works. If any man serve Me, him will the Father honor. It shall be a Sabbath of rest unto you. Ye shall know the truth, and the truth shall make you free. I am with you alway, even unto the end of the world. I will not send them away fasting, lest they faint in the way. There remaineth therefore a rest to the people of God. When thine eye is single, thy whole body also is full of light.



## STATE NORMAL SCHOOL, YPSILANTI.

Founded, 1849; dedicated, Oct. 5, 1852; first session opened, March, 1853. Teachers, 27; students, about 1100. John M. B. Sill, Principal.

MARCH, 1891.

31 Days.

Third Month.

_					
Day of Mon'h.	Day of Week.		Sun sets.	Moon rises.	MOON'S PHASES.   D. H. M.
123456789011234567890123456789	Somoue Thrist So	H6 36 6 35 33 22 55 55 55 548	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	H M 11 46 mor 0 53 2 1 3 6 6 19 sets 7 42 3 7 10 12 11 26 7 10 12 2 37 3 26 4 4 43 5 12 2 37 6 5 59 rises 8 34 4 9 39 5 10 45	Keep my Sabbaths: I am the Lord your God. To him that overcometh will I give to eat of the tree of life. God is not the God of the dead, but of the living. Let thy mercy, O Lord, be upon us, according as we hope in thee, Rejoice in the Lord always; and again I say, Rejoice. When ye pray use not vain repetitions, as the heathen do. Thy will be done in earth, as it is in heaven. The Sabbath of rest: an boly convocation. If thou wilt enter into life, keep the commandments. The very hairs of your head are all numbered. Ye are of more value than many sparrows. Relieve the oppressed, judge the fatherless, plead for the widow. If ye be willing and obedient, ye shall eat the good of the land. Give us help from trouble, for vain is the help of man. It is the Sabbath of the Lord. His compassions fail not; they are new every morning. Acquaint thyself now with Him, and be at peace. The Lord preserveth all them that love him. With what measure ye mete, it shall be measured to you again. Though your sins be as scarlet, they shall be white as snow. Be reconciled to thy brother; then come and offer thy gift. Ye shall keep my Sabbaths. There is nothing covered that shall not be revealed. Take My yoke upon you, and learn of Me. I forgave thee all that debt, because thou desirest Me. Ye shall be my sons and daughters, saith the Lord Almighty. Cast thy burden upon the Lord, and he shall sustain thee. One is your Master, even Christ; and ye all are brethren.
80	MO	0 46	10 23	111 52	I will not be afraid what man can do unto me. The Lord's hand is not shortened, that it can not save.



#### ASYLUM FOR THE INSANE, KALAMAZOO.

1801

30 Days.

Established by act of Legislature 1848, opened 1859. Two principal buildings, brick with stone trimmings, one for Male, one Female Department. Present value of property, about \$1,000,000. Nearly 1000 inmates. George C. Palmer, M. D., Superintendent.

ADDII

Sourth Month

POL	Pourtn Montn.				APRIL, 1891. 30 Days
4	, i	1		rigan	MOON'S PHASES. D. H. M.
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon rises.	Third Quarter 2 0 30 morn.  New Moon 8 2 57 eve.  First Quarter 15 7 40 "  Full Moon 23 11 5 "
123456789011234567890123345678	We Thrist Sat Will Sat Of We Thrist Sat San Twe Thrist San Twe Thris	H 5 433 434 435 5 404 43 43 43 43 43 43 43 43 43 43 43 43 43	H M 6 25 6 6 6 27 6 6 27 6 6 30 6 31 6 33 6 34 6 36 6 41 6 42 6 43 6 55 6 56 56 56 56 56 56 56 56 56 56 56	H M 0 577 1 588 8 41 1 4 25 5 7 7 1 588 8 41 1 4 25 5 7 7 1 5 16 6 11 26 6 11	Thou shall love the Lord thy God with all thy heart. He that gathereth not with Me scattereth abroad.



EASTERN ASYLUM FOR THE INSANE, PONTIAC.

Occupied Aug. 1, 1878; Female Department completed May, 1882. Value of property, about \$750,000. Patients Jan. 1, 1889, 785. Dr. C. B. Burr. Superintendent.

Fi	fth	Ma	nth.	
		mu	****	

## MAY, 1891.

_				
_	Ι.	For Mich	rigan	MOON'S PHASES. D. H. M.
بَعِ	إيدا			Third Quarter 1 7 51 morn.
Day of Month.	Day of Week.	Sun rises. Sun sets.	Moon rises.	New Moon 8 0 15 "
೭ಆ	lS≽	<u>.</u>	E.E	First Quarter 15 1 4 eve.
2-	15	1 1 1 1 m	8 = 1	Full Moon
Ã	IÃ	50 50	×	Full Moon
_	I			
_	L	HMHM	HM	
1	Fri	4 56 6 59		
2	Sat	4 54 7 0	2 16	He that receiveth Me receiveth Him that sent Me.
3	S	14 5X 7 1	1 2 AX	l The Sabbath chall he a cian between Me and you
4	Mo	4 51 7 2	8 16	I am not come to call the righteous, but sinners, to repentance.
5	Tu	4 50 7 3	8 42	In the Lord Jehovah is everlasting strength.
	We	4 49 7 4	4 8	I am not come to call the righteous, but sinners, to repentance.  In the Lord Jehovah is everlasting strength.  If ye keep My commandments, ye shall abide in My love.
7	Th			i can do an unings inrough Christ, which strengtheneth me.
1 2 3 4 5 6 7 8 9 10 11	Fri	4 46 7 7	sets	In your patience possess ye your souls.
9	Sat	4 45 7 8	9 5	Search the Scriptures, for in them ye think ye have eternal life.
10	8	4 44 7 9	10 12	Thou hast profaned My Sabbaths. He whom God hath sent speaketh the words of God.
11	Mo	4 43 7 10	11 12	He whom God hath sent speaketh the words of God.
12	Tu	4 42 7 11	mor	Master, I will follow thee whithersoever thou goest.
13	We	4 41 7 12	0 8	He whom God hath sent speaketh the words of God.  Master, I will follow thee whithersoever thou goest.  Be of good comfort; thy faith hath made thee whole.  According to your faith be it unto you.  In such an hour as ye think not, the Son of Man cometh.  No man can serve two masters; ye cannot serve God and Mammon.  They have put no difference between the holy and profane.  The spirit truly is ready, but the flesh is weak.  Rejoice, because your names are written in heaven.  Where the spirit of the Lord is, there is liberty.  If ye he willing and obedient, ye shall eat the good of the land.  Let your communication be, Yea, yea; Nay, nay.  Consider the lilies of the field, how they grow.  It is lawful to do well on the Sabbath day.  He that believeth on Me, though he die, yet shall he live.  Enter thou into the joy of thy Lord.
14	Th	4 40 7 13	0 44	According to your faith be it unto you.
15	Fri	4 89 7 14	1 17	In such an hour as ye think not, the Son of Man cometh.
18	Sat	4 88 7 15	1 44	No man can serve two masters; ye cannot serve God and Mammon.
17	S	4 87 7 16	2 8	No man can serve two masters; ye cannot serve God and Mammon. They have put no difference between the holy and profane.
18	Mo	4 86 7 17	2 30	The spirit truly is ready, but the flesh is weak.
19	Tu	4 35 7 18	2 51	Rejoice, because your names are written in heaven.
20	W e	4 84 7 19	3 11	Where the spirit of the Lord is, there is liberty.
21	Th	4 33 7 20	8 33	If ye be willing and obedient, ye shall eat the good of the land.
22	F.LI	4 82 7 21	8 57	Let your communication be, Yea, yea; Nay, nay.
23	Sat	4 81 7 22	rises	Consider the lilies of the field, how they grow.
24	S	4 80 7 23	9 41	It is lawful to do well on the Sabbath day.
25	Mo	4 80 7 24	9 47	He that believeth on Me, though he die, yet shall he live.
26	Tu	4 29 7 25	10 46	Enter thou into the joy of thy Lord.
27	we	4 29 7 26	11 87	Prepare ye the way of the Lord: make his paths straight.
28	Th,	4 28 7 27	mor	Pray without ceasing: in everything give thanks.
29	FT	4 27 7 27	0 18	Let us cleanse ourselves from all filthiness of the flesh and spirit.
80	Sat	4 27 7 20	U 52	Casting all your care upon Him, for He careth for you,
31	<u>s_</u>	4 26 7 29	1 21	The Sabbath was made for man.



NORTHERN ASYLUM FOR THE INSANE, TRAVERSE CITY.

Jas. D. Munson, Superintendent. Established, 1885; cost, \$564,000; capacity, 600.

### JUNE, 1891.

	Day of Week.			igan	MOON'S PHASES. D. H. M.
교표	<b>2</b>	zó:	انسا	أثعا	New Moon 6 10 23 morn.
ō 5	22	S	1 2	a %	First Quarter
جج	<b>5</b>	a E	□ 86	호텔	Full Moon 21 11 12 eve.
Day of Month.	25	Sun rises.	Sun sets.	Moon rises.	Third Quarter 28 5 16 "
		<u></u>	32		
	ĺ	н м	нм	н м 1 47 2 11 2 36	
1	Mo	4 26	7 30	1 47	In His name shall the Gentiles trust.
2	Tu	4 25	7 30	2 11	Whosoever will lose his life for My sake shall find it.
3	We	4 25	7 81	2 36	Hold up my goings in thy paths, that my footsteps slip not.
4	Th	4 24	7 32	3 8	Thou, Lord, hast not forsaken them that seek thee.
5	Fri	4 24	7 33	3 35	Suffer little children, and forbid them not, to come unto Me.
1 2 3 4 5 6 7 8 9	Sat	1 91	7 22	ente	Wiedom is justified of her childen
7	8	4 23	7 34	8 53 9 53 10 38	Ye bring wrath upon Israel by profaning the Sabbath.
8	Мo	4 23	7 35	9 53	Strive to enter in at the strait gate.
9	Tu	4 23	7 35	10 38	This is My commandment, that ye love one another.
10	We	4 22	7 36	11 15	Follow peace with all men, and holiness.
ĩi	Th	4 22	7 36	11 45	Resis the devil, and he will flee from you.
12	Fri	4 22	7 37	mor	Follow peace with all men, and holiness. Resis the devil, and he will flee from you. Fight the good fight of faith, lay hold on eternal life.
· 13	Sat	4 22	7 37	0 10	Why beholdest thou the mote that is in thy brother's eve?
14	S	4 22	7 33	0 32	The Son of Man is Lord of the Sabbath.
15	Мo	4 22	7 38	0 53	When the Son of Man cometh, shall he find faith on the earth?
16	Tu	4 22	7 38	1 14	Why stand we here all the day idle?
17	We	4 22	7 39	1 35	What will ve therefore that I do unto you?
18	Th	4 22	7 39	1 58	O thou of little faith, wherefore didst thou doubt?
Ĩ9	Fri	4 23	7 39	2 24	Is not the life more than meat, and the body than raidment?
20	Sat	4 23	7 40	2 56	What shall a man give in exchange for his soul?
21	S	4 23	7 40	3 36	And He reasoned in the synagogue every Sabbath.
22	Мo	4 23	7 40	rises	If God be for us, who can be against us?
23	Tu	4 23	7 40	9 31	The Lord is my light and my salvation; whom shall I fear?
24	We	4 24	7 40	10 16	Seek ve first the kingdom of God and his righteousness.
25	Th	4 24	7 40	10 54	Unto every one that hath shall be given.
26	Fri	4 24	7 40	11 25	All things are possible to him that believeth.
27	Sat	4 25	7 40	11 51	He hath filled the hungry with good things.
28	S	4 25	7 40	mor	There remaineth therefore a rest to the people of God.
29	Mo	4 25	7 40	0 15	A city that is set on an hill can not be hid.
30	Tu	4 26	7 40	0 40	Fight the good fight of faith, lay hold on sternal life. Why beholdest thou the mote that is in thy brother's eye? The Son of Man is Lord of the Sabbath. When the Son of Man cometh, shall he find faith on the earth? Why stand ye here all the day idle? What will ye therefore that I do unto you? O thou of little faith, wherefore didst thou doubt? Is not the life more than meat, and the body than raidment? What shall a man give in exchange for his soul? And He reasoned in the synagogue every Sabbath. If God be for us, who can be against us? The Lord is my light and my salvation; whom shall I fear? Seek ye first the kingdom of God and his righteousness. Unto every one that hath shall be given. All things are possible to him that believeth. He hath filled the hungry with good things. There remainesh therefore a rest to the people of God. A city that is set on an hill can not be hid. When I am in the world, I am the Light of the World.



MICHIGAN STATE PRISON, JACKSON.

Opened, 1839; capacity, about 750; value of property, about \$700,000. Hiram F. Hatch, Warden.

### Seventh Month.

## JULY, 1891.

Day of Month.  Day of Week.	Son Recks.	Moon's Phases.         D. H. M.           New Moon         5         9         58 eve.           First Quarter         13         11         20         "           Full Moon         21         7         54 morn.           Third Quarter         27         10         32         "
1 We 2 Th 3 Fri 4 Sat 5 8 Mo 7 Tu 8 9 Th 10 Fri 112 Sat 13 Mo	H M H M H M M 4 287 7 40 1 7 7 40 1 1 36 4 27 7 40 2 10 4 28 7 40 2 50 4 28 7 40 3 57 4 28 7 40 3 57 4 28 7 7 40 3 57 4 30 7 38 10 36 4 33 7 38 10 36 4 33 7 37 11 17 4 34 7 37 11 37	Every branch in Me that hath not fruit, He taketh it away. I will not leave you comfortless; I will come unto you. He hath not despised nor abhorred the affliction of the afflicted. Despise not the chastening of the Almighty. There the wicked cease from troubling and there the weary be at rest. There is forgiveness with Thee, that Thou mayest be found. They that be whole need not a physician, but they that are sick. Even so, Father, for so it seemed good in thy sight. He that soweth and he that reapeth may rejoice together. Behold, the kingdom of God is within you.  Ask, and ye shall receive, that your joy may be full.  I will hear what the Lord will speak.  In the world ye have tribulation, but be of good courage.  We love Him, because He first loved us.  Lord, that our eyes may be opened.  Enter ye in at the strait gate.  If any man thirst, let him come to Me and drink.  Let not your heart be troubled, neither let it be afraid.  A day in thy courts is better than a thousand.  Bring forth therefore fruits meet for repentance.  I am not come to destroy, but to fulfil.  Of His kingdom there shall be no end.  He shall set the sheep on his right hand, but the goats on his left, Go and sell that thou hast, and give to the poor.  Though He slay me, yet will I trust in Him.  I was glad when they said. Let us go into the house of the Lord.  He shall redeem Israel from all his iniquities.  To him that knocketh it shall be onened.
15 We 16 Th 17 Fri	4 36 7 35 mor 4 36 7 35 mor 4 36 7 35 0 23 4 37 7 34 0 52	we love Him, because He first loved us.  Lord, that our eyes may be opened.  Enter ye in at the strait gate.  If any man thirst, let him come to Me and drink.
18 Sat 19 S 20 Mo	4 38 7 34 1 28 4 39 7 33 2 13 4 40 7 32 3 9	Let not your heart be troubled, neither let it be afraid. A day in thy courts is better than a thousand. Bring forth therefore fruits meet for repentance.
22 We 23 Th 24 Fri	4 42 7 30 8 51 4 43 7 29 9 24 4 44 7 29 9 53	Of His kingdom there shall be no end.  He shall set the sheep on his right hand, but the goats on his left, Go and sell that thou hast, and give to the poor.
25 Sat 26 8 27 Mo 28 Tu	4 45 7 28 10 20 4 46 7 27 10 45 4 47 7 26 11 10 4 48 7 25 11 38	Though He slay me, yet will I trust in Him.  I was glad when they said. Let us go into the house of the Lord.  He shall deliver thee in six troubles; yea, in seven.  The Lord is very pitiful, and of tender mercy.
29 We 30 Th 31 Fri	4 49 7 24 mor 4 50 7 23 0 10 4 51 7 21 0 48	Return unto me, for I have redeemed thee. He shall redeem Israel from all his iniquities. To him that knocketh it shall be opened.



- STATE-HOUSE OF CORRECTION AND REFORMATORY, IONIA.
Located, 1877; first cost, \$250,000; inmates, about 750. Edwin C. Watkins, Warden.
Asylum for Insane Criminals attached; completed Sept., 1885; cost, \$91,750; about 120 inmates.

E۱	~ь	46	<b>M</b> -	nth.

### AUGUST, 1891.

Day of Month.	Day of Week.	Sun rises.		MOON'S PHASES.   D. H. M.
123456789012345678901234567	Sat ON TWE THIS SAN TWENT FIRST SAN TWENT FROM THE TRANSPORT OF THE TRANSP	H M 4 527 2004 4 537 7 904 4 537 7 104 4 537 7 104 5 5 17 7 7 6 5 17 7 7 6 5 17 7 6 5 17 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	H M 1 33 2 255 2 53 8 15 8 15 8 19 9 22 9 42 10 21 10 20 10 11 11 22 10 15 11 53 3 6 7 52 8 19 9 11 10	Thou art the Christ, the Son of the living God. Believe on the Lord Jesus Christ, and thou shalt be saved. God will render to every man according to his deeds. He will regard the prayer of the destitute, and not despise the poor. The fear of the Lord is the beginning of wisdom. All that is within me bless His holy name. With offerings in their hand to bring to the house of the Lord. Heal me, O Lord, and I shall be healed.  To them that hath no might He increaseth strength. Sanctify them in the truth; thy Word is truth. My strength is made perfect in weakness. Hold Thou me up, and I shall be safe.  I have prayed for thee, that thy faith fall not. On the first day of the week Paul preached unto them. They that worship Him must worship Him in spirit and truth. He that believeth not on the Son shall not see life. Be ye therefore wise as serpents, and harmless as doves. Fear not them which kill the 60dy, but are not able to kill the soul. He that shall endure to the end, the same shall be saved. Serve Him with a perfect heart and with a willing mind. He that regardeth the day regardeth it to the Lord. If they seek Him, He will be found of them. If they forsake Him, He will cast them off forever. He will keep the feet of all His saints.  Many that are first shall be last, and the last shall be first.
29 30 31	Sat Mo	5 21 6 40 5 22 6 38 5 23 6 3	0 20 0 1 17 1 2 18	Many be called, but few chosen. Whosoever will come after Me, let him deny himself. Forsake not the assembling of yourselves together. Thou shalt love thy neighbor as thyself.



#### SCHOOL FOR THE DEAF; FLINT.

Founded, 1848; opened, 1854. Formerly called the Institution for Educating the Deaf and Dumb; for the blind also until 1879. Property, about \$500,000; inmates, about 300. Marshall T. Gass, Superintendent.

SEDTEMBED

Ninth Month

MINICH	montn.	SEPIEMBER, 1891	30 Days.
	For Michiga		
Day of Month. Day of Week.	Sun rises. Sun sets. Moon	New Moon 3 2 16 First Quarter 11 5 7 Full Moon 17 11 4 Third Quarter 23 5 7	morn. eve.
1 Tu We 3 Thri Sat 12 Thri Sat	H H H H H H 5 34 6 34 3 4 5 26 6 31 34 5 22 6 23 8 7 5 22 6 23 6 24 8 5 22 6 23 6 12 10 5 24 6 12 10 10 10 10 10 10 10 10 10 10 10 10 10	21 To-day the Detroit Journal begins its minh year. 24 Not what I will, but what Thou wilt.  Ye know not what hour your Lord doth come.  Take heed that no man deceive you.  He that receiveth Me receiveth Him that sent me.  Freith cometh by hearing, and hearing by the Word of the sent of the se	riches. on. d's. our Lord. er. ive us our sins. men. with Christ, ererr.



STATE PUBLIC SCHOOL, COLDWATER.

For dependent and neglected children of two to twelve years. Opened, 1874; capacity, about 320; value of property, about \$250,000. C. F. Newkirk, Superintendent.

OCTOBER, 1891.

31 Days.

Tenth Month.

For Michigan   New Moon.   2 6 58 eve.	TOTAL INC	,,,,,,,,		<i>-</i>
	B		Now Moon Strikens. D. H. M.	
1 Th   5 56 5 42 4 50   2 Fri   6 20 5 20 4 5 20   3 Sat   5 58 5 38 sets   4 Sat   5 58 5 38 sets   5 Mo   6 1 5 35 6 56   6 0 5 37 6 23 at him that thinketh he standeth take heed lest he fall. 6 Tu   6 2 5 34 7 25   7 We   6 3 5 32 7 55   8 Th   6 4 5 30 8 35   9 Fri   6 5 5 22 9 24 By Me if any man enter in, he shall be saved. 10 Sat   6 6 5 37 10 24 Man shall not live by bread alone, but by every word of God. 11 Sat   6 10 5 22 0 48 Man shall not live by bread alone, but by every word of God. 12 Mo   6 9 5 24 mor   13 Tu   6 10 5 22 0 48 Man shall not live by bread alone, but by every word of God. 11 Sat   6 15 5 10 3 2 0 48 Man shall not live by bread alone, but by every word of God. 12 Mo   6 9 5 24 mor   13 Tu   6 10 5 22 0 48 Man shall not live by bread alone, but by every word of God. 14 We   6 115 20 2 7 My times are in Thy hand. 15 Th   6 12 5 18 3 26   16 Fri   6 135 17   4 45   17 Sat   6 15 5 17   4 55   18 Sat   6 18 5 11 7 17   18 Behold, the eye of the Lord; be of good courage. 19 The   6 20 5 9 8 4   20 Th   6 215 8 8 59   21 Sat   6 235 5 31 3   22 Sat   6 235 5 31 3   23 Sat   6 235 5 31 3   24 Sat   6 235 5 31 3   25 Sat   6 235 5 31 3   26 Mo   6 255 2 0 7   27 Tu   6 28 4 59 2 1 2   28 We   6 28 4 59 2 1 2   29 Th   6 29 4 88 3 13 3   30 Fri   6 29 4 88 3 13 3   31 Sat   6 29 4 58 5 1 1 6   31 Sat   6 29 4 58 5 3 3   32 Sat   6 29 4 59 2 12   33 Hat   6 29 4 59 2 12   34 Sat   6 29 4 59 2 2 12   35 Sat   6 29 4 59 2 2 12   36 Mo   6 255 2 0 7   37 The Lord will be a refuge for the oppressed. 38 Sat   6 29 4 59 2 2 12   39 Th   6 29 4 88 3 13 3   30 Fri   6 29 4 88 3 13 3   31 Sat   6 29 4 59 5 1 10 4   31 Sat   6 29 4 59 5 1 10 9   32 Sat   6 29 4 59 5 1 10 9   33 Sat   6 29 4 59 5 1 10 9   34 Sat   6 29 6 9 59 59   35 Sat   6 29 6 9 59   36 Sat   6 29 6 9 59   37 Sat   6 29 6 9 59   38 Sat   6 29 6 9 59   39 Sat   6 29 6 9 59   30 Sat   6 29 6 9 59   31 Sat   6 29 6 9 59   32 Sat   6 29 6 9 59   33 Sat   6 29 6 9 59   34 Sat   6 29 6 9 59   35 Sat   6 29 6 9 59   36 Sat   6 29 6 9 59   3	1 1 5 5 5 7 8 6 6 2 3 4 5 6 6 2 3 4 5 6 6 2 3 4 5 6 6 2 3 4 5 6 6 2 3 4 5 6 6 6 3 3 6 6 6 3 5 6 6 6 3 5 6 6 6 3 5 6 6 6 3 5 6 6 6 5 6 6 6 5 6 6 6 5 6 6 6 5 6	H M H M F 5 422 4 200 5 5 405 5 21 5 388 sets 5 5 346 5 5 346 7 7 235 5 5 326 7 5 5 327 7 5 5 24 mor 5 5 22 10 4 4 5 12 6 3 7 5 5 15 7 15 6 3 8 5 6 5 5 14 6 6 4 5 12 6 6 37 5 5 11 7 17 5 5 9 8 5 6 6 9 5 9 5 5 5 11 7 3 5 5 5 5 11 7 17 5 5 9 8 5 6 6 9 5 9 5 5 5 11 1 3 3 5 5 5 5 5 11 7 17 5 5 9 8 5 6 6 9 5 9 5 5 5 11 1 3 5 5 5 11 7 17 5 5 9 8 5 6 6 9 5 9 5 5 5 11 3 3 5 5 5 2 0 7 5 5 2 10 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	M H M H M H M H M H M H M H M H M H M H	mself. .tion. od. .ration.



### INDUSTRIAL HOME FOR GIRLS, ADRIAN.

Opened Aug. 1, 1881, for wayward or disorderly girls of ten to seventeen years. Managed mostly by women; all officers immediately in charge are women; Margaret Scott, Superintendent.

NOVEMBER, 1891.

30 Days.

Eleventh Month.

Day of Month.	Day of Week.			higan	Moon's Phases. D. H. M. New Moon
98	Se Se	Sun rises.	Sun sets.	Moon rises.	First Quarter 9 2 46 morn. Full Moon 15 6 16 eve.
۶,Σ	> P	a E	a %	Q E	Full Moon 15 6 16 eve.
8	<b>S</b>	ž	2	ايخا	Third Quarter
_			<u> </u>		
12345678901123456 11123456	SMO TU WE THE SAT WE THE SAT SMO	H M 6 33 6 34 6 35 6 36 6 40 6 41 6 42 6 44 6 45 6 46 6 49 6 50 6 53	H M 4 54 4 53 4 551 4 459 4 488 4 47 4 45 4 41 4 40 4 39 4 38	H M 6 16 sets 5 56 6 34 7 20 8 17 9 22 10 33 11 48 mor 1 4 2 21 3 38 4 55 4 6 54 rises	My grace is sufficient for thee.  Lord, lift up the light of thy countenance upon me. Draw nigh to God, and he will draw nigh to you.  With the Lord there is mercy, and with him plenteous redemption. The Lord is our king; he will save us. Fear thou not, for I am with thee. Repent ye therefore, and be converted. The love of God constraineth us. Lo, I am with you always, even unto the end of the world. I the Lord thy God will hold thy right hand. Fear not; for I have redeemed thee; thou art mine. I, even I, am He that blotteth out thy transgressions. This poor man cried, and the Lord heard him. Thou knowest not what a day may bring forth. Ye are the temple of the living God. I will joy in the God of my salvation.
17 18	Tu	6 53	4 37	5 51	If ye keep my commandments, ye shall abide in my love.
18	IWA	lh 54	14 X6	1 6 43	i know whom i nave believed.
19	Th.	6 55	4 35	7 43	We are more than conquerors, through Him that loved us. The God of Jacob is our refuge. I will guide thee with mine eye.
20	FTI	6 50	4 34	8 47	The God of Jacob is our refuge.
21	Sat	0 50	4 34	9 52	Godly sorrow worketh repentance to salvation.
22	<b>3</b>	0 08	4 00	10 57	The Lord is the strength of my life; of whom shall I be afraid?
23	T.,	2 1	4 32	mor 0 1	
24 25	S Mo Tu We	7 9	4 31	1 1	Let everyone that nameth the name of Christ depart from iniquity,
ระ	Th	7 4	4 31	2 2	
26 27 28 29	Th Fri	7 5	4 31 4 31	3 2	Believe on the Lord Jesus Christ, and thou shalt be saved.
2ีล์	Sat	7 6	4 30	4 3	Believe on the Lord Jesus Christ, and thou shalt be saved. Be not weary in well-doing.
20	Sat S	7 7	4 30	15 7	Give not grudgingly, for God loveth a cheerful giver.
30 I		7 8	4 29	6 14	The secret of the Lord is with them that fear him.



STATE SOLDIERS' HOME, GRAND RAPIDS.

Dedicated Dec. 30, 1836; cost, \$99,667.57, besides grounds \$16,000. Open to indigent soldiers or sallors honorably discharged from service in the Civil War. Inmates, about 435. Col. Byron R. Pierce, Manager.

Twe	lfth	Mo	nth.

### DECEMBER, 1891.

_				_	
-	1			ligan	MOON'S PHASES. D. H. M. New Moon
Day of Month.	Day of Week.	Sun rises.	Sun sets.	Moon rises.	First Quarter. 8 11 13 " Full Moon. 15 6 52 " Third Quarter. 22 11 38 eve. New Moon. 30 9 20 "
112345678901234567890	We The Fri Sat SMO Tu We The Fri Sat We The Fri Sat We The Fri Sat Tu We The Fri Sat Tu We The Fri Sat Tu We	7 90 7 100 7 110 7 114 7 115 7 117 7 117 7 117 7 117 7 120 20 21 7 22 22 22 23 24 25 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	4 28 28 28 28 28 28 28 28 28 28 28 28 28	6 11 7 14 8 25 9 39 39 10 53 3 51 1 5 25 24 2 35 5 25 24 2 5 5 24 2 5 5 24 2 5 5 2 5 2	He that overcometh shall inherit all things. It is your Father's good pleasure to give you the kingdom. God is our refuge and strength, a very present help in trouble. He doth not afflict willingly, nor grieve the children of men. Examine yourselves, whether ye be in the faith. Preserve me, O God; for in thee do I put my trust. The Lord God will help me; therefore shall I not be confounded. Great peace have they which love thy law. It shall come to pass that before they call I will answer. But let him ask in faith, nothing wavering. Let us draw near with a true heart, in full assurance of faith.

# DETROIT JOURNAL YEAR BOOK.

Abbreviations. — There is so much danger of confusion between Col. and Cal., that Colo. is now the approved contraction for Colorado, and Calif. or Cfa. for California. The former (Calif.) is in use by the post-offices of that State and many of its newspapers. W. should not be written for either of the new States Washington or Wyoming, for obvious reasons.

Abel, Frederick L., late captain of the Detroit Light Guard, was born in 1856, at Cleveland, O., at seven moved to Milwaukee, and thence to Chicago; burnt out in the great fire, he returned to Milwaukee and came here from that

city in February, 1872. Went Europe in 1875 and studied music in the Conservatory at Frankforton-the-Main, returning to Detroit in 1880. Joined the Detroit Light Guard April 3, 1882, and particip-



ated in three prize drills as a private, at Detroit, Grand Rapids and Cleveland, acting as 2d sergeant and left guide at the latter. At the end of his first year's enlistment was promoted to corporal, and received sergeant's warrant in a month from that date. Served as 4th, 3d and 2d sergeants and was acting 1st sergeant under Capt. Murphy. Was elected 2d lieutenant on Dec. 31st, 1884, 1st lieutenant Sept. 6th, salmon, averaging ten pounds each,

1886, and captain Sept. 17, 1888, which position he has held since. Captain Abel is engaged at the Detroit Conservatory of Music as an instructor, and is married and resides at 187 Charlotte

avenue, Detroit.

Acre.—The English or statute acre (our acre) is 4840 square yards; the Scotch acre, 6150.4; Irish acre, 7840; Welsh, 4320; Cornish, 5760; Leicestershire, 2308¾; Westmoreland, 6760; Cheshire, 10,240. The English acre was originally considered to be as much ground as a yoke of oxen could plow in a day. The arpent, or French acre, used in early French surveys along the Detroit and St. Clair rivers, and still in use in Louisiana and the Province of Quebec, contained 48,400 square feet, by a royal edict of 1669. The common arpent had 40,000 square feet, the arpent of Paris 32,400.

African Languages.—A curious characteristic of these is that a prefix serves the same purpose that a suffix does in many other tongues. For example, we have England, English, Englishman; Spain, Spanish, Spaniard; but in one of the East-African dialects Uganda is the name of the country, Maganda of its language, and Waganda is the name of its inhabitants.

Alaska has been so far surveyed as to establish its length of coast-line at 18,211 miles, or almost twice the entire remaining ocean coast-lines of the United States. The country cost but \$7,000,000, and many thought this a waste of money; but the value of its fisheries alone in 1889 was \$3,000,000, and it is expected to yield that much revenue annually to the Government for the next twenty years. , A thousand

gle haul. The seal fisheries yield to the government \$317,500 annually, or enough to pay 4 per cent on the amount paid Russia for the country. A single island is said to be practically a mountain of ore, and to contain mineral wealth enough to pay off the whole of our national debt.

Alger, Gen. Russell A., was born at Lafayette, Medina county, Ohio, Feb. 27, 1836. His parents were of New England stock, and his great grandfather was a gallant soldier in the war Young Alger was of the Revolution. left fatherless and moneyless at a very early age, and sturdily attempted not

only to earn hisown living but to help his mother. One of his earliest ventures was taking care of 20 cows at \$1.50 per week, Eight years he worked for the farmers in Ohio, one of his experiences being service for a



man for some years who made him labor from sun to sun, and charged him ten cents per hour for all time lost by sickness or any other reason. taught school, his first experience being teacher of the boasted "toughest" school in northern Ohio. In 1857, he entered the law office of Wolcott & Upsord at Akron, and two years later he was admitted to the bar. He entered the law office of Otis & Coffinbury, Cleveland, and staid there for a few months. He then hung out his shingle at Grand Rapids, but when the war broke out, in 1861, he enlisted in the 2d Michigan Cavalry, and was soon after sworn in as Captain of Company C of that regiment. His military record as given in the military history of the state is as follows: "Captain 2d Cavalry, Sept. 2, 1861; Major, April 2, 1862; wounded and taken prisoner at Boonesville, Miss., July 1, 1862; escaped same day; Lieutenant-Colonel 6th Michigan Cavalry, October 16, 1862; Colonel 5th Michigan Cavalry, Feb. 28, 1863; wounded in action at Boonsboro, Md., July 8, 1864; Brevet Brigadier-General U.S. Volunteers

have been taken in Sitka Bay in a sin | for gallant and meritorious service at Trevillian Station, June 11, 1864; Brevet Major-General U. S. Volunteers, June 11, 1865, for gallant and meritorious services during the war." After the war Gen. Alger entered the lumber business at Grand Rapids, and laid the foundation of that enormous business which he is now the head of. then became a member of the firm of Moore & Alger of Detroit, and then the head of that of R. A. Alger & Co., and later the firm became Alger, Smith & Co. General Alger was the pioneer in the business of lumbering by steam, and from his little logging railway grew the Detroit, Bay City & Alpena R. R. In 1884 he was elected Governor of Michigan. He served for two years, and declined a renomination. In 1888 he was one of the leading candidates for the Presidency before the Republican Convention, and will doubtless be again presented by the Michigan delegation in 1892. His charity is as wide as the needs of the suffering, and while he freely gives of his abundance to all organized charities that come under his eye, his private beneficences have been for several years among the most marked of those of any in the state. In 1889, Gen. Alger was elected Commander-in-Chief of the G. A. R., and was actively instrumental in securing the 1891 National Encampment for Detroit.

Almanacs.—The first were made by Arabian scholars, as their name hints. A similar work, however, now in the British Museum, belongs to the time of Rameses the Great, 1200 B. C. It was written with red ink on papyrus, for six years' use, and included dates of religious rites, fates of persons born on certain days, and notes of planetary influence on business ventures. A French "Almanac of Popular Traditions" is still issued annually, from the Breton Calendar, in which one may learn that June 11 is still the longest day with that primitive people, while each of the first twelve days of the year infallibly foreshows the weather of each of its months. If weather goes wrong, there are many saints to apply to for remedy. St. Valentin and St. Marina replace Neptune, and order about the winds: Mikail gives fine days; Milion preserves from hail and drouth; Nonna and Pern give rain; and Sylvester—generally connected in Germany with red nosesprevents white frosts, while Kler and Barba act as lightning-conductors. No

duties of Æsculapius, among them Mark, who is supposed to pay special attention to snake and mosquito bites; Ceres is represented by eight, and Lucina is the prototype of four. Pie-crust rises at the bidding of Riwal; Anton and Kristina fatten pigs, and Jill cures them when they are ill; mad dogs flee before the names Tujen and Bienzi; Isidore destroys moles; and Herve is the declared enemy of wolves. Things must get mislaid a good deal in Brittany; for three saints-Goneri, Pergat, and Jann Diarc'hem-have nothing else to do but look out for them. makes children grow fast; Dider and Glaoda teach them to speak; and Libouban, Tujen, and Lijer see that they walk early. The last is a saint (Leger) who makes horses run in England. Perhaps out of the whole calendar St. Pezr (Peter) has his hands fullest, for he has to fill all the hives with honey and all the nets with fish, besides giving full broods of chickens to the hens and in his odd moments charming away rheumatics and lumbago. The Almanac also contains a collection of Normandy beggars' chants, with music, fairy tales, popular riddles, and the addresses of all recognized "folkloristes" throughout the world.

Alphabets.—A recent arrangement of oriental alphabets in the King's Library, British Museum, led to the publication of some interesting facts. The Babylonians and Assyrians used about 600 characters, thought to have been borrowed from the Akkadians, or earlier inhabitants of Chaldea, who used them to represent words, as the Chinese use their signs. Some of the East-Indian writings shown date back to 250 B. C. Egyptian manuscripts show that when the people became Christians they dropped the native characters and took the Greek letters, adding six from the popular or Demotic alphabet to indicate sounds not represented by the Greek. The Coptic or later Egyptian writing is confined to Christian literature, of which the oldest fragments yet found in it are as recent as the fourteenth cen-

Aluminum —This metal is one of the most remarkable in the whole catalogue, having a tensile strength of 40,000 lbs. to the square inch, extreme lightness (specific gravity 21/2 against gold 19), electric conductivity eight times that of iron, malleability and ductility almost equal to gold, and still used.

fewer than seventy-six saints divide the elasticity much like silver, and is exceedingly sonorous, especially in bars; is not affected by air, water, or most acids. It long resists corrosion, can be hardened like steel, and being the lightest metal for its strength that is known, it is thought by some that the problem of a flying machine will be solved by it. A cubic foot of it weighs only 162 lbs., against gold 1231.2 lbs. It is rarely found in the metal, but every clay-bed is a mine of it, and it is now separated by a cheap and rapid chemical process. A pound of it was worth nearly \$200 a few years ago, but only \$10 two years ago, and now but \$1, while it can be produced for a few cents. It is likely to supersede other metals in a great variety of manufac-

American Newspaper Publishers' Association.—An organization of the proprietors and business managers of the leading daily newspapers of the United States. The society has a New York office at room 206 Potter building. The initiation fee is \$20, and the annual dues \$50. Mr. James W. Scott of the Chicago Herald is president, and Mr. G. M. Brennan is the manager in charge of the office. The association was first formed in February, 1887, at Rochester, New York. It has recently extended its privileges to the smaller papers of the country, particulars of which can be learned by those interested, by addressing Mr. Brennan, the manager.

Ancestors.—An interesting calculation has been made, showing that from the birth of Christ to the year 1867—56 generations, counting three to the century—139,235,017,489,534,976 ancestors might be required for any person living The astronomer in the latter year. Proctor calculated that if from a single pair, for 5000 years, each husband and wife had married at 21 years of age and there had been no deaths, the population of the earth would be 2,199,915 followed by 144 ciphers. It would require to hold this population a number of worlds, the size of this, equal to 3.166,526 followed by 125 ciphers. The human mind has no power of conceiving such enormous numbers. It is a task even to write them.

Apron.—This is a word said to have originated in a queer mistake, the accidental printing of a napperon, French for napkin, as "an apperon, which was corrupted into apron. some English counties the old form is

Arithmetic, Humors of.—Dr. Holmes: "I always fancy I can hear the wheels clicking in a calculator's brain. power of dealing with numbers is a kind of 'detached-lever' arrangement, which may be put into a mighty poor watch." Pet Marjorie: "But 7 times 9 is devilish, and what Nature itself can't endure!" A Swiss philosopher: "Man is the whole of arithmetic, compacted however out of all numbers: he can therefore produce numbers out Arithmetic is the of himself. truly absolute or divine science. Theology is arithmetic personified." The National Journal of Education: "The number of the inhabitants of the world who use the English tongue is estimated at one billion; Hindustanee the same; while the Chinese-speaking population is twice as many as these combined, or about four billions." A Detroit dispatch: "Sixteen billions of logs are lying in Upper Michigan" (it was the dispatch that was lying). Detroit paper: "There are 12,000 applications for consulates. 12000 | 1200 | .01." Life: "How many seconds are there in a duel? How many minutes in a previous meeting? How many degrees in a college? How many barrels in a political campaign? How many feet make a book-agent tired? How many pounds make a prize fight? How many sins make one scruple? How many perfumes make one scent? Reduce seven Jacks to gills. Reduce three gallons of whisky to drunks. Add one oyster to each plate of soup in a church festival, and determine the rise in price per plate." Dr. Ray Palmer the hymnwriter:

ARITHMETIC.

THE SUM OF IT ALL.

The boy that by addition grows.

And suffers no subtraction, Who multiplies the thing he knows, And carries every fraction, Who well divides his precious time, The due proportion giving, To sure success aloft will climb, Interest compound receiving.

Art-works.—The countries admitting works of fine art free of duty are Austria, Belgium, Denmark, France, Germany, Great Britain, Greece, Holland, India, Italy, New South Wales, Sweden, and the province of Victoria. Our own country still imposes customs duties upon paintings and statuary, 15 per cent ad valorem under the new tariff, against 30 as before, with several exemptions. Engravings, etchings, and photographs, 25 per cent.

Arndt-street Presbyterian Church. Arndt-st., between McDougall and Elmwood aves., two miles N. E. from City

Hall, has seats for about 200, was built for mission S. S. and preaching in 1884, and enlarged in 1889; value of property, \$3000. It is proposed to move soon to a better site. The church has not yet been fully organized,



but about 40 are waiting to become members. Services Sunday at 10:30 and 7:30 (7:45 summer), S. S. 2:45. Free seats and cordial invitation. Gerrit Huyser, minister in charge, was born at Ridderkerk, Holland, Feb. 28, 1838, came to Detroit 1851, graduated Olivet College 1867, studied theology with Dr. Geo. Duffield, was ordained June 2, 1869, ministered in Wisconsin and Illinois, and took his present charge in March, 1889. His taste for linguistic studies, and familiarity with most Teutonic and Romanic languages, specially fit him for this field. ence, 735 McDougall-av.; "latchstring" always out.

Asbury M. E. Church, Ferry ave. and Dubois st., Detroit, was organized about 1882 as Garfield Mission by the Central church, and removed to present location Sept., 1885. Sittings in meeting house, about 225; valuation. \$4500; membership, about 170; Sundayschool, about 250; infant class, 120. Sunday services 10:30 and 7:30; S. S. day, 7:30; young people's meeting Wednesday, 7:30; young people's meeting Friday, 7:30. Rev. C. E. Mitchell, pastor 1886-90, is now a student at Boston University. Present pastor, Rev. Jas. H. Williams, 638 Grandy ave.

Asteroids.—About 300 asteroids have To Aug. 25, 1889, been discovered. 287 had been found and numbered, and many of them named.

Bank Notes, Portraits on,—The following appear upon our national currency: \$1 notes, Washington; \$2, Jefferson; \$5, Jackson; \$10, Webster; \$20, Hamilton; \$50, Franklin; \$100, Lincoln; \$500, Gen. Mansfield; \$1,000, DeWitt Clinton; \$5,000, Madison. On silver certificates—\$10, Rob't Morris; \$20, Com. Decatur; \$50, Edw. Everett; \$100, Monroe; \$500, Sumner; \$1,000, Marcy. On gold notes—\$20, Garfield; \$50, Silas Wright; \$100, Benton; \$500, Lincoln; \$1,000, Alex. Hamilton; \$5,000, Madison; \$10,000, Jackson.

Banks, the Great.—The capital of the Bank of England is \$72,765,000; Bank of Ireland, \$13,845,150; Bank of Scotland, \$7,500,000; Bank of France, \$36,500,000; Imperial Bank of Germany, \$30,000,000.

Belle Isle Park.—This is so far the only Detroit park of size yet improved and open to the public, though within

the last year Clark Park at the west end has been purchased. Belle Isle, at the head of the Detroit river and commanding superb views on all sides, contains 670 acres, all of which is de voted to pub purposes.



The tract was bought by the city in 1879, and cost \$200,000. About \$300,-000 have since been expended for its improvement and maintenance, besides \$300,000 for the bridge. This is a superb work, 3134 feet long, including approaches, and was built in 1887-8. It is thrown across from the foot of Frontenac avenue, Detroit, nearly at right angles with the channel, and 22 feet from the water to the bridge-floor. There are 12 spans—a fixed span next the mainland, 156 feet long, then a pivotdraw span of 318 feet, followed by ten fixed spans each of 156 feet. Each span consists of three trusses, each carrying a wagon and street-car way 24 feet wide, and two sidewalks of 8 feet The draw-span is moved by steam power, and when open gives two passage-ways for vessels, each of 125 feet.

Bells.—The great bell of Moscow, "Czar Kolokol," cast 1733, is computed to weigh about 440,000 lbs., or

220 tons. The largest in actual use is also in Moscow, and weighs 128 tons. Other big bells: Kioto, Japan, 83 tons; the new "Kaiserglocke," Cologne Cathedral, 25; Notre Dame, Paris, 17; Sens Cathedral, 16; "Big Ben," Westminster, London, over 13; Amiens Cathedral, 11; "Great Peter," York, Eng., 10; "Great Tom," Oxford, 7. A chime of bells regularly contains five to twelve; less than five are called If the bells are stationary and struck by hammers, they more properly constitute a carillon, which may have 40 to 50 bells. The Angelus bell, otherwise the Ave, Ave Maria, Ave Mary, Gabriel, or Lady bell, is rung in Catholic countries morning, noon, and evening, for recitation by believers of the three texts and salutation, "Ave Maria!" or "Hail, Mary!" in memory of the annunciation to the Virgin by Gabriel of the coming incarnation. The Elevation or Sanctus, and the Mass, Sacring, or Saints' bell, are small bells rung at intervals during the celebration of the mass.

Bennett School Law.—The following is the main provision of the famous Wisconsin act, which has evoked very powerful and persistent opposition, especially from the German Lutherans and Catholics. Except, however, the requirement for teaching in English, it has been substantially the law of that State for years:

Every person having under his control a child between the ages of seven and fourteen years shall annually cause such child to attend some day-school for a period not less than twelve weeks; provided that any such child shall be excused from attendance on its being shown that the person so neglecting is not able to send such child to school, or that instruction has otherwise been given for a like period in the elementary branches commonly taught in the public schools. No school shall be regarded as a school under this act unless there shall be taught therein, as part of the elementary education of children, reading, writing, arithmetic, and United States history in the English language. No child under thirteen years of age shall be employed or allowed to work for any person, company, firm, or corporation at labor or service in any shop, factory, mine, store, place of manufacture, business, or amusement, except that the judge of the county court may grant a permit for any child over ten years to be so employed, on proof that such child can read and write the English language, and that its parents are needy and its labor is necessary for the support of the family.

Berlin has 1,530,000 population by the latest returns, which is the population of New York City, pretty nearly. Berlin has about 175,000 people in its suburbs. Church, V. A. C., Detroit, was organized Feb., 1889, successor of Trinity Ev.

Luth.church, occupying chapel corner Pulford and Meldrum aves. The present church-edifice was consecrated Nov. 10,1889; seating cap acity, about 800; value of property, **\$9000**; voting members, 63; families, 120.

REV. R. SMUKAL.

Services on Sunday 10:30 and 7:30, Wednesday at 7:30 during Advent and Lent. Pastor R. Smukal was born in Germany Sept. 21, 1861, and came with his parents to America in 1864; entered the ministry Aug. 19, 1883, and served the churches of his faith at Iron Mountain and Pilot Knob, Mo., and came to his present pastorate Aug. 8, 1888. Residence, 888 Meldrum ave.; calls at any time.

Births.—Some interesting statistics we been collected. In European have been collected. countries there is a steady overplus of boys at birth, the ratio being 102-106 to 100 girls,—in most countries 105, in England, Wales, and Wurtemburg 104, in Austria 106, Italy 107, and Roumania and Greece 111, though these figures are for but few years and not alto-gether trustworthy. Still-born boys are in even greater excess, 128 in Russia to every 100 still-born girls; 140 in Still-born constitute 3 to 4 per cent of all births. Illegitimate births are about 7 per cent-in Prussia 7.9 in 1880, but in Frankfort 10, Berlin 13.7, Breslau 15.9, Dantzig 17, Konigsberg 18.9, and Bonn 22; of Jewish mothers in Prussia, 1875–81, 2.73 per cent.; Roman Catholics, 5.64; Evangelical Protestants, 8.85. In Bavaria under improved marriage laws, the percentage dropped from 22.47 in 1865 to 16.47 in Twins or more children occur in one to two of 100 births; the ratio of still-born is much greater in these cases. Three cases of five children at a birth have been recorded during this century in Prussia alone. In that country the average birth-rate per 1000 inhabitants

Bethania (Evangelical Lutheran) after the Franco-Prussian war, only 33.7, recovering to 39.7 the next year. War, hard times, and dear food always depress the birth-rate. February is the greatest birth-month, from most marriages in May; and the next is September. Density of population does not affect the rate, and there is little difference between city and country; in Prussia, 1872-81, the figures for them respectively were 40.9 and 41.2 Annual births per 1000 per 1000. range from 25.8 in France and 26.7 in Ireland to 49.5 in Russia.

Bible Books.—Genesis is the book of beginnings; Exodus, of the exode or departure; Leviticus, of atonement; Numbers, of sojourn: Deuteronomy, of the second or twice-given law, as its Greek name indicates; Joshua, of conquest; Judges, of the judges of Israel; Ruth, a pastoral idyl; 1 and 2 Samuel, of the kingdom; 1 and 2 Kings, of royalty; 1 and 2 Chronicles, of "things omitted," Paraleipomena in the Septuagint; Esther, the romance of providence; Psalms, a little Bible (Luther), epitome of all Scripture (Athanasius), treasury of David (Spurgeon); the Proverbs, of wisdom; Ecclesiastes, the Preacher, as its Greek title denotes; Song of Solomon, the Song of Songs in the Revised Version, old name the Canticles, the Holy Song (Luther); Isaiah, the Gospel of the Old Testament; Jeremiah, book of warning; Lamentations, a funeral dirge; Ezekiel, the prophet of the iron harp; Hosea, an Ephraimite book; Joel, pioneer of the prophets; Jonah, prophet of overthrow; Micah, of controversy; Nahum, burden of Nineveh; Habakkuk, prophet of faith; Zephaniah, compendium of all prophe-cy; Zechariah, prophet of the Advent; Malachi, "My Messenger." Matthèw is the Hebrew Gospel; Mark, Gospel of the works of Christ; Luke, of redemption; John, the Main Gospel (Origen), the Gospel of Gospels, the Holy of Holies in the New Testament (Dr. Schaff), the diamond among Gospels (Lange), the heart of Jesus (Emerti); Acts, the Gospels applied, the first church history, book of witness; Romans, chief book of the N. T. and the purest Gospel (Luther), the profoundest book in existence (Coleridge), cathedral of the Christian faith (Godet), epistle of righteousness; 1 Corinthians, of wisdom; 2 Cor., of comfort; Galatians, of faith, an "Apologia pro Vita Sua, perand doctrinal sonal vindication" 1865-78 was 37.8, but in 1871, the year (Schaff); Ephesians, epistle of the

heavenlies, the Song of Songs in the N. T. (Ibid.), the epic (Dr. Pierson) or lyric of the N. T.; Philippians, the disciples' balance-sheet; Colossians, companion of Ephesians; 1 and 2 Thessalonians, epistles of the second coming; 1 and 2 Timothy, of doctrine; Philemon, the idyll of the N. T.; Hebrews, the Leviticus of the N. T.; James, epistle of holy living; 1 and 2 Peter, "precious" epistles; 1 John, of light, love, and life; 2 John, tribute to womanhood; 3 John, of hospitality; Jude, of warning; Revelation or Apocalypse, book of the last days.

Blazer.—This word, now used for the bright-colored or striped loose coat usually worn by tennis or cricketplayers, originally applied only to the red jacket worn by a boat-club at St. John's College, Cambridge, Eng., where the term originated.

Blizzard.—A correspondent of London Notes and Queries says that this word, which most people account a pure Americanism, is well known in the midland counties of England, and is there used to designate anything blazing, blasting, blinding, dazzling, or stifling. Blizzer, blizzom, and blizzomer have similar uses. Blizzared may mean blasted or withered, and "may I be blizzarded" is a familiar oath in these regions.

Books.—Among novels and kindred books whose scenes are laid in Michigan are Miss C. F. Woolson's "Anne" and "Jupiter Lights," Dean's "Hero-ines of Petosega" (Petoskey), and Marion Harland's "With the Best Intentions"—all these at Mackinac; Cooper's "Oak Openings,"—the valley of the Kalamazoo; B. F. l'aylor's "Theophilus\_Trent"—Southeastern Michi-H. Riley, of Constantine; "Legends of Michigan," by F. J. Littlejohn, Allegan; "A New Home: Who "Il Follow?" by Caroline M. Kirkland; "Shoepac Recollections," by O. S. Wilcox, De-troit; "The Fatal Secret," by Mrs. F. Gorton, of Fenton, ("Ida Glen-Gorton, wood)." "Little Venice," by Grace Denio Litchfield, in The Century for July, 1890, and since printed in a book, is located upon the St. Clair Flais, above Detroit. Dr. W. T. Harris, U. S. Commissioner of Education, thinks the ten best novels in all literature are "Wilhelm Meister," "Vicar of Wakefield," "Heart of Mid-Lothian,"
Rob Roy," "Marble Faun," "Consu-

elo" and its sequel, "Romola," "Les Miserables," "Gulliver's Travels," and "Robinson Crusoe," excluding reluc-tantly "Ivanhoe," "Villa on the Rhine," and "Don Quixote." The ten best books, according to a recent test made chiefly in New England by the Springfield (Mass.) Homesteau, an agaicultural paper, are also all novels: "Ben Hur," "Ramona," "David Copperfield," "Ivanhoe," "Uncle Tom's Cabin," "Little Women," "John Halifax," "Looking Backward," "Jane Eyre," and "Adam Bede," Popular Springfield (Mass.) Homestead, an agritaste for fiction in the Northwestern States is represented by a large wholesale book-house in Chicago as about as follows: Roe, 1000; Dickens, 800; Mrs. Holmes, 342; Miss Alcott, 282; Scott, 232; Mrs. Stowe, 122; May A. Fleming, 110; Wallace, 100; Eliot, 84; Harland, 79; Howells, and Stockton, 24 each; Black, 12; Blackmore, 10; Aldrich, 6; Collins, 5; Reade, 4; Fielding, 2; H. James, 1. voting contest instituted a leading London paper shows Miss Braddon to be the favorite novelist of the English public, Rider Haggard following 200 votes behind, and Walter Besant pushing him close.

Following are some of the titles called for at the Portland (Me.) Public Library: "Jane's Heirs" (Jane Eyre), "John Ingersoll" (John Inglesant), "Irving's Albramah" (Alhambra), "Illuminated Face" (Face Illumined), "Prohibition" (Probation), "Bulfinch's Agent Fables" (Age of Fable), "Patty's Reverses" (Patty's Perversities), "Little Lord Phantom" (Fauntleroy), "Silence of Dean Stanley" (Maitland), "Mona's Charge" (Mona's Choice), "Zigzag's Chassic Wonders" (Zigzag Journey in Classic Lands), "Boots and Spurs" and "Boots and Shoes" (Boots and Saddles), "Mary's Lamb" (Mary Lamb), "Fairy Tails" (Fairy Tales), "Chromos [Cameos] from English History," "Noosie's Father" (Nuttle's Father), "Not in the Perspective" (Prospectus), "Sand Maid" (Sun Maid), "Lion and the Tiger" (Lady or Tiger), "Boy and Viola" (Roy and Viola), and "Prince of David's Palace" (Prince of the House of

David).

Bridge, Detroit. — Several projects have been mooted for facilitating transit across the Detroit River, and at least

two companies are formed to throw a bridge from the American to the Canadian shore, between Detroit and Windsor, mainly for use of the railways. Dec. 10, 1888, a bill was introduced in the Federal House of Representatives, to authorize the construction of a high-level bridge, "to be in the clear above the highest masts," by the Long-span Bridge Company, of which the incorporators are understood to be John H. Miller of New York, James Andrews, A. Kennedy, and T. Rea, of Pittsburg, and Bryant Walker of Detroit. The bill has not become a law, and its passage is opposed by influential representatives of the shipping interests, with \$60,000,000 capital, passing a vessel by Detroit every seven minutes in the season of navigation, 22,000,000 tons of commerce annually. Estimated cost, \$8,000,000. Another plan is to build a winter bridge, with only two piers in the river, and draw constantly open in time of navigation, one of these, over the main channel, to be 900 or 1000 feet long, among the longest ever made, and the other, on the Detroit side, 500 feet, having a total clear way of 1400 or 1500 feet. It is proposed to of 1400 or 1500 feet. It is proposed to build this bridge from the foot of Twenty-fourth street, Detroit, where the river is but 2600 feet wide. scheme is backed by the Peninsular Bridge Company, W. K. Muir President, Francis F. Palms Secretary, John Pridgeon, R. W. Gillett, H. C. Parke, James Millen, W. C. Colburn, Alex. McVittie, F. E. Kirby, Directors. It already has a franchise from the Canadian Government. Estimated cost, \$800,000. [See also "Tunnel."]

Bridges, Great.—One of the greatest events of the last year was the formal opening, March 4, by the Prince of Wales and a vast multitude of other dignitaries and the commonalty, of a new railroad bridge across the Frith of Forth, between Queensberry and Inverkeithing, Scotland. It is a cantilever bridge, 8991 feet, or nearly 134 miles, in length, and 150 feet above water. Besides approaches, the bridge proper is 5349 feet long; and the tops of the cantilevers are high as St. Paul's Cathedral, or 450 feet. They are three gigantic structures, each a diamondshaped formation of steel girders and cross-pieces, like a huge latticed cage, the central one resting on a small rocky islet, without which the bridge could not have been built. It was almost | The Independent:

seven years in building, contains over 50,000 tons of the finest steel, cost about \$10,000,000, and as a feat of engineering is one of the modern wonders of the world. Other great bridges:

	Length,	Greatest span,
	feet.	feet.
Tay Bridge,	10,780	245
Niagara Bridge	808	808
Landore Bridge	1,760	110
Crumlin Bridge	1,800	150
Britannia Bridg	e. 1.511	460
Brooklyn Bridg	e. 5,862	1.600

The suspension bridge proposed over the Hudson river at New York City, according to published plans, will have a total length, including approaches, of 6500 feet; height of towers from high-water mark, 500; from deepest foundation, 690; of bridge above high water, over 185; length of each landspan, 1500; of middle span, 2850 in the clear; width, 86; railway tracks, 6 to 10; cables, 4; diameter of same, 48 inches; iron and steel in the structure, 60,000 tons; cost, exclusive of land damages, \$16,000,000. It is to cross from a point near Fourteenth street, in New York, to the meadows between Hackensack River and Bergen Hill, above Jersey City. On the New York side a great double-decked, thirty-track depot will be built.

**Buddhism** has twelve sects in Japan and thirteen in China.

Building Calculations.—One thousand shingles, laid four inches to the weather, cover 100 square feet of surface; five pounds of shingle nails fasten them on. One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching of the One thousand laths cover 70 floor. yards of surface; 11 pounds of lath-Eight bushels of nails nail them on. good lime, 16 of sand, and one of hair, make enough good mortar to plaster 100 square yards. A cord of stone, three bushels of lime, and a cubic yard of sand, lay 100 cubic feet of wall. Five courses of brick lay one foot in hight on a chimney; six bricks in a course make a flue four inches wide and 12 long; and eight bricks in a course make a flue eight inches wide and 16 long.

Calendar.—The following neat "oldfashioned calendar" in modern phrase is contributed by Sophie E. Eastman to The Independent: January brings the snow,
Winter's flag of truce; and lo!
As the lengthening days appear
On the dial of the year,
Sleigh-bells with their merry chime Strike the hours for Father Time.

February brings the rain, Beating on the window-pane; Mimic lakes and shallow seas Hide the marsh and flood the leas.

March brings breezes flerce and loud; Now the giant oaks are bowed, Yielding homage to the blast As the wild wind hurries past.

April spreads her carpet green, While behind their rustic screen Tiny buds, in pleased surprise, Lift their chalice to the skies.

May sends flocks and herds afield, And the dandelions yield Stores of gold along the mead, Where the kine unheeding feed.

June brings lilies fair and tall, Roses climbing o'er the wall; Azure skies and berries sweet Tempt the children's wandering feet.

Hot July, and mowers stand, Scythe and rake on either hand; While the farmer's loaded wain Slowly threads the narrow lane.

August brings the cradled grain, Veiling close the arid plain; And anon the tireless bee Hums his Benedicite.

Now September's lavish hand Scatters plenty o'er the land; Crimson peach and purple plum, Pear and amber grape have come.

October binds her golden sheaves, With scarlet glory tints the leaves. The Harvest Moon prolongs her stay, Enticed for once to brief delay.

On the hills a purple haze Signals chill November days. Nuts were garnered long ago, As the practiced squirrels know.

Streams with crystal fetters bound, Leafless trees and russet ground Mark December's dreary round. Christmas comes with wonted cheer, Then we hail the glad New Year.

Calumet & Hecla Mining Company.-One of the most massive and elaborate hoisting-plants ever built has erected within a few months by this company, at Calumet, Mich. It has three triple expansion, vertical inverted beam-engines; cylinders of 18, 234, and 48 inches diameter, all 7-foot-6-inch stroke; shaft hollow, 29 feet long, 221 inches diameter, bearings 22 by 40 inches; fly-wheel, 30 feet diameter; five of the largest Belpaire boilers ever built, each 34 feet 5 inches long, 90 inches diameter, weighing 86,000 lbs., throwing a 2000-lb. shot with 700 lbs. and containing 201 three-inch tubes 16 of powder through 29 inches of

feet long; fire-boxes, 9 feet by 4 feet 7 inches; working pressure, 185 lbs. per square inch. Forty-six of these boilers are in service or ordered. Engine-house 112 by 68 feet, boiler-house 76 by 68. Hoisting drum conical, 27 feet diameter at one end, 14 feet 7 inches at the other, carrying 5500 feet of 1% inch wire rope. An automatic device varies its speed from 30 to 45 revolutions a minute, securing uniform rate of hoist.

Calvary Presbyterian Church, Detroit, is situated on Michigan avenue, looking up Maybury avenue, two miles

from the City The Hall. building was erected in 1887, seats 700 and including its site represents a property of \$30,about 000. Membership of church, 450; of Sunday-600. school. Services o f some kind oc-



cur nearly REV. GEO. W. BARLOWevery evening, and the doors are open Present officers of the church: to all. Elders, Chas. T. Duffie, John Munro, W. M. Caldwell, Wm. McKerrow, W. T. Winchester; Trustees, S. A. Plumer, Geo. Mead, John Mead, Geo. W. Stringer, Jas. Meston, W. R. Mont-gomery, W. T. Hurd. Rev. Geo. W. Barlow, pastor of Cal-

vary church, was born in La Gro, Wabash Co., Ind., Jan. 3, 1838; was educated at Wabash College and Lane Seminary, entered the ministry in the spring of 1868, and became pastor here in Oct., 1879, serving the church acceptably for now eleven years. Residence, 88 Maybury ave.; calls at any

Candle-power.—This, so often used nowadays as the unit of light, is the amount produced by a sperm candle one-sixth of a pound in weight, burning 120 grains an hour.

Cannon.—Some reckless statements have been published about great guns made or projected; but the largest yet cast is an English 180-ton Armstrong gun 39 feet long, calibre 17 inches,

wrought iron. Krupp's largest gun is said to be of 150 tons, nearly 48 feet in length, with 1223 lbs. of powder hurling a 3500-lb. projectile through 60 inches of iron. His 139-ton and 119-ton guns report still better results, though lighter. The most remarkable gun yet cast in this country was made last year (1890) at the Watervliet foundry, of but 10-inch bore, but capable of throwing a 560-lb. shot with 230 lbs. powder 12 to 15 miles, and to penetrate about 24 inches of armor-plate. The rage for huge cannon is dying out, but designs for a 156-ton cannon are understood to be held in the royal foundry at Woolwich, Eng.

Capital of the United States.—It was at Philadelphia Sept. 5, 1774, to Dec. 20, "76; Baltimore, to March 4, "77; Philadelphia again, to Sept. 27, "77; Lancaster, Pa., three days, to Sept. 30, "77; York, Pa., to July 2, "78; Philadelphia, to June 30, '83; Princeton, N. J., to Nov. 20, '83; Annapolis, Md., Nov. 26-30, '84; Trenton, N. J., to Jan. 11, '85; New York, to '90; Philadelphia, 1790-1800, when the capital was finally removed to Washington.

Capitals, State.—The Government Geological Survey has determined the general elevation of 34 of them above the sea, as follows: Annapolis, Md., 4 feet; Boston, Mass., 7; Providence, R. I., 10; Albany, N. Y., and Sacramento, Cal., 30; Trenton, N. J., 38; Hartford, Conn., and Dover, Del., 39; Augusta, Mc., and Newport, R. I., 48; Richmond, Va., 84; Montgomery, Ala., 132; Salem, Ore., 137; Concord, N. H., 252; Little Rock, Ark., 266; Columbia, S. C., 296; Raleigh, N. C., 300; Harrisburg, Pa., 319; Nashville, Tenn., 445; Montpelier, Vt., 484; Charlestown, W. Va., 517; Austin, Tex., 518; Springfield, Ill., 594; St. Paul, Minn., 702; Indianapolis, Ind., 722; Columbus, O., 783; Des Moines, Io., 840; Madison, Wis., 848; Lansing, Mich., 852; Topeka, Ks., 884; Atlanta, Ga., 1050; Lincoln, Neb., 1155; Carson City, Nev., 4630; Denver, Colo., 5175. The capitals of the new States are Bismarck, N. D., Pierre, S. D., Helena, Mont., Olympia, Wash., Boise City, Id., and Cheyenne, Wyo. The capital of Arizona was removed in February, 1890, from Prescott to Phænix, a city of 8000 and the seat of justice for Maricopa county. A bill has been Maricopa county. the Territorial passed by Legislature to change the capital of Oklahoma from Guthrie to Oklahoma City.

Cars.—A surprising number and variety of railroad cars are now made. The following are enumerated in the "Car-builders' Dictionary": Baggage, boarding, box, buffet, caboose, cattle or stock, coal, derrick, drawing-room, drop-bottom, dump, express, platform or flat, gondola, hand, hay, hopperbottom, horse, hotel, inspection, lodging, mail, milk, oil, ore, palace, passenger, pay, post-office, push, portal, refrigerator, restaurant, sleeping, sweeping, tank, tip, tool or wrecking, and three-wheeled hand-cars. Statistics of the more common:

CLASS. Length, ft. Weight, lbs. latform car. 34 16,000-19,000 Price Platform car. Freight or box, 34 22,000-27,000 Refrigerator, 30-34 28,000-34,000 Passenger, 50-52 45,000-60,000 550 860-1,100 4,400-5,000 10,000-20,000 28,000-34,000 45,000-60,000 Passenger, Drawi'g-room 50-65 70,000-80,000 12,000-20,000 Sleeping, 50-70 60,000-90,000 Street, 5,000-6,000 800-1,200 16 The capital stock of the Pullman Palace-car Company has grown to \$25,-000,000, which at recent quotation of 215 represents a value of \$53,750,000.

Cass-avenue M. E. Church, on Cass and Selden aves., Detroit, Mich, occupied in 1883 its present chapel on Selden ave., and

awaits the larger building to be. Value, \$25,-000; capacity, 350: membersh i p of church. 300; services: Sunday 10:30 and 7:30 Bible - school 2:30; prayermeeting. Wednes d a y eve:Epworth League, Friday evening.



Rev. C. T. Allen, pastor, was born in Sharon township, Washtenaw Co., Mich., Sept. 8, 1841, was a Federal soldier in the War of the Rebellion, entered the ministry Sept. 8, 1868, and came to the Cass-ave. church Sept., 1889. Present residence, 883 Third ave.

Census.—The numerous shortcomings of the census taken last year seem the more surprising, in view of the iron-clad oath which every enumerator had to take, as follows:

I, —— —, an enumerator for taking the Eleventh Census of the United States, do solemnly swear (or affirm) that I will make a

true and exact enumeration of all the inhabitants within the subdivision assigned to me, and that I will also faithfully collect all other statistics therein, as provided for in the act for taking the Eleventh Census, and in con-formity with all lawful instructions which I may receive, and will make due and correct returns thereof as required by said act.

Among curiosities of the census: the small town of Parish, Oswego Co. N. Y., it found 13 families with a total of 195, or an average of 15 per family. One had 29, the offspring of two wives; the other children, ranging from 10 to 18 in a family, had but one mother in each. Albina, a town in Oregon, shows a percentage in growth in the amazing fig-ure of 3469.23, or almost 35 times its population of 1880. It had 143 people then, 5104 in 1890.

For statistics of the census, see Ap-

pendix.]

Central Methodist (First Meth. Epis.) Church, Detroit, is the oldest Protestant church in the city, lineal descendant

of the earliest oneorganized in Michigan, and the only one which can show a charter dating from Territorial days. It had its beginning in 1810, was incorporated 1822, and has erected for its own use four church edifices in Detroit,



REV. W. W. RAMSAY.

the last three on Woodward-ave., northeast corner of Congress-st., southeast corner of State, and northeast corner of Woodward and Adams aves. buildings were erected soon after the union, 1864, of the First and Second churches, and the name of Central M. E. Church was then settled as that of the new building. The chapel was completed in 1865, cost \$28,000, and seats 500; the church in 1867, at a cost of \$92,000, seating 1200; parsonage in 1883, cost \$12,000. The grounds covered by these three structures cost only \$13,900, but if now vacant would perhaps command as much as the en-The society has tire property has cost. been the foster-mother of nearly every other M. E. church in Detroit, and has always and widely been noted for its church on large gifts to the general benevolences Farmer st. in of the church. Its work is fully sys- 1871. Instrumental music was intro-

tematized, with various missionary and benevolent organizations, including an Epworth League of young people, and it has the distinction of being the first Protestant church in the city to establish a young people's prayer-meeting and Young People's Society. The Central Mirror, a monthly paper, is the organ of the church. The Rev. W. W. Ramsay, D. D., after filling important pastorates in Cincinnati, Dayton, Akron, Erie, Covington, Pittsburg, and Ann Arbor, is serving the third year of his second pastorate with this church. At his request no biographical notes are added.

Central Church of Christ, Detroit, has long worshiped in an old church building on Washington-ave., but will soon

remove to a fine new structure on Cass Park, with about 700 sittings and a total property οf \$35,000. Membership, about 300. Services a t usual hours on Sunday. with free seats and cordial welcome. Pastor W. B.



REV. W. B. THUMPSON

Thompson was born in Richland Co., O., Feb. 21, 1848, became a minister of the gospel in June, 1874, and pastor of this church July 8, 1883.

Central Presbyterian Church, Detroit, was founded by Scotch residents of Detroit Nov. 10, 1842. Its first build-

ing, now occupied on Washington ave. by the Church of Christ, was erected in It be-1844. came connected with the Canada Pres byterian Church in April, 1845 and built itspresent



duced the next year. Membership. 505; Sabbath school, 350; average yearly revenue, \$5000. Two young peoples' societies, literary and Y. P. S. C. E., are important factors; also the Ladies' Aid Society. The first pastor was Rev. David Inglis. The present pastor, Rev. Jas. F. Dickie, born at Kilmarmock, Scotland, Nov. 13, 1845, was licensed to preach July 13, 1869, became at once pastor of St. Thomas' church, Greenock, Scot., pastor of St. Andrews' church, Berlin, Ont., Feb. 13, 1872, and of Central church April 13, 1879. Residence, 174 Lafayette ave.; at home daily 1 to 2:30 P. M.

Charley Ross Case.—This continues still occasionally to engage the public mind, and reports are now and then heard that the boy, now if alive a young man grown, has been found. But a short time ago another groundless story of the kind was started, the supposed youth being located in Boston. July 1, 1874, Mr. Christian K. Ross, of Germantown, a part of Philadelphia, returned from a few weeks' visit to Atlantic City, and found his two youngest children, Walter and Charley, missing, the latter four years of age. He learned upon inquiry that two strangers, passing his house with horse and wagon, had tempted the boys successfully with a ride. Walter was abandoned on the road about eight miles away, but Charley totally disappeared. His abductors however opened correspondence with the father, to obtain a large ransom for his son. Upon advice of the authorities and his friends, he refused to pay this, but joined in the offer of large rewards for recovery of the child and punishment of the kidnappers. The Mayor of Philadelphia offered \$20,000 reward. and a very general interest was taken in the case throughout the country; but the lost child was never found. On the night of Dec. 13, of the same year, two burglars were killed in the attempt to rob the house of Judge Van Brunt, near New York City. One of them lived long enough to say that he was Joseph Douglas and the other Wm. Mosher; that they had stolen Charley Ross, and that Douglas, the burglar killed instantly, was the only one who knew where the boy was. Walter Ross was brought to view the bodies, and fully identified them. The secret of Charley Ross's fate probably died with them.

Chemical Substances.—Common and scientific names: Aqua fortis, nitric acid; aqua regia, nitro-muriatic acid: blue vitriol, sulphate of copper; cream of tartar, bitartrate of potassium; calomel, chlorid of mercury; chalk, car-bonate of calcium; salt of tartar, carbonate of potassa; caustic potassa, hydrate of potassium; chloroform, chlorid of gormyle; common salt, chlorid of sodium; copperas or green vitriol, sulphate of iron; corrosive sublimate, bichlorid of mercury; diamond, pure carbon; dry alum, sulphate of aluminium and potassium; Epsom salt, sulphate of magnesia; Ethiop's mineral, black sulphid of mercury; fire damp, light carbureted hydrogen; galena, sulphid of lead; Glauber salt, sulphate of sodium; glucose, grape sugar; Goulard water, basic acetate of lead; iron pyrites, bisulphid of iron; jeweller's putty, oxid of tin; king's yellow, sulphid of arsenic; laughing gas, protoxid of nitro-gen; lime, oxid of calcium; lunar caustic, nitrate of silver; mosaic gold, bisulphid of tin; muriate of lime, chlorid of calcium; nitre or saltpetre, nitrate of potassa; oil of vitriol, sulphuric acid; potash, oxid of potassium; realgar, sulphid of arsenic; red lead. oxid of lead; rust of iron, oxid of iron; sal ammoniac, muriate of ammonia; slacked lime, hydrate of calcium; soda, oxid of sodium; spirits of hartshorn, ammonia; spirit of salt, hydrochloric or muriatic acid; stucco or plaster of Paris, sulphate of lime; sugar of lead, acetate of lead; verdigris, basic acetate of copper; vermilion, sulphid of mercury; vinegar, acetic acid (diluted); volatile alkali, ammonia; water, oxid of hydrogen; white precipitate, ammoniated mercury; white vitriol, sulphate of zinc.

Chicago, under its latest annexations, is about 24 miles long from north to south, and 5 to 10 miles wide, covering about 1741 square miles, or 111,680 acres. The three divisions separated by the river and its branches are connected by 63 swing-bridges and two tunnels. There are 2047 miles of streets, of which 628 are improved. The public parks have 59 miles of drives, including the boulevards. Lincoln Park contains 250 acres; Garfield and Douglas, each 185; Humboldt, 200; Jackson and Washington combined, 957; total, including several smaller parks, about 2000 acres. The infant Chicago covered 2½ square miles 45 years ago. Its population in 1840 was

5752; in 1850, 34,437; in 1890, by the Testament and of the New-Testament census, 1,101,263.

Child-growth.—A child in its fourth year should be about 3 feet high, and weigh 28 lbs. or more; sixth year, 34 feet and 42 lbs.; eighth, 4 and 56; at 12 years, 5 and 70. With the addition of 3 or 4 inches in height should come an added weight of 28 lbs. A young person of 54 feet should weigh about 112 lbs.; 5 feet 8 inches, 126; 5 feet 10 inches, 140; 5 feet 11, 154; 6 feet, 168. Growth is very irregular in children and young generally; perhaps two inches may be gained in two months, and for the next 10 months not another inch, even to the While growth is thus age of 12 years. rapid fatigue is readily produced; dur-ing the pause weight is gained, and work or training can go on again.

Chinese.—The population of Chinatown, San Francisco, is about 24,000, or 2000 more than in 1880. About 10.000 more Chinese are elsewhere in California.

Christ Church, Jefferson ave., Detroit; parish organized May 26, 1854; chapel erected 1857 and church-build-

ing 1860; value of property \$98,-600; sittings 926, and 260 in chapel; communicants, 800; 12 parochial guilds; vested choir. under Mr. F. A. Dunster, organist and c hoirmaster. Rector, Rev. Joseph H.



Johnson; Rev. J. H. Johnson. assistant, Rev. John W. Thrush. Mr. Johnson was born in Schenectady, N. Y., June 7, 1847; educated at Williams College and the General Theol. Sem. in New York; was ordained Deacon July 29, 1883, and Priest July 29, 1884. After serving parishes in Ulster Co., N. Y., Bristol, R. I., and Westchester, N. Y., he was called to his present pastorate.

Christian Socialism, as now organized in this country, is mainly an outgrowth of the remarkable Bellamy book, "Looking Backward." It is defined by its chief American promoter as "the spirit of the Socialism of the New

church. In man's relations to God. Jesus Christ preached an individual gospel; accordingly, in their relationsto God, Christ's disciples must be individualists. In man's relations to man. Jesus Christ preached a social gospel; accordingly, in those relations, his disciples must be Socialists." Its declaration of principles, accepted in Boston April 15, 1889, affirms its objects to be, "(1) To show that the aim of Socialism is embraced in the aim of Christianity. (2) To awaken members of Christian churches to the fact that the teachings of Jesus Christ lead directly to some specific form or forms of Socialism; that, therefore, the church has a definite duty upon this matter, and must, in simple obedience to Christ, apply itself to the realization of the social principles of Christianity." Its special demand is for "a reconstructed social order, which, adopting some method of production and distribution that starts from organized society as a body and seeks to benefit society equitably in every one of its members, shall be based on the Christian principle that 'we aremembers one of another.' While recognizing the present dangerous tendendency of business towards combinations. and trusts, we yet believe that the economic circumstances which call them into being will necessarily result in thedevelopment of such a social order, which, with the equally necessary development of individual character, will be at once true Socialism and true Christianity."

Church of Our Father (Universalist), West Grand Circus, Detroit, was organized Feb., 1879, incorporated Jan.,

1880, and of house worship dedicate d 🎇 It is of stone, Gothic, seats 800, and with lot is worth **\$**75,000. Membership, 350; parish list, 300 families. Sunday services 10:30 and 7:30; Sunday 1



school at REV. LEE S. M'COLLESTER.
noon. Working departments—Ladies'
Aid, Social-life Committee, Young

People's Guild, Lenda-Hand, King's crease for the year, 8494 churches, Daughters, Choral Society, Popular 4867 members. Daughters, Choral Society, Lecture Course, Reading-room Association. Strangers cordially welcome, and invited to the reading-room, always open. Rev. Lee S. McCollester, pastor, born Westmoreland, N. H., June 5, 1859, graduated Tufts College 1881 and 1884, shepherded Claremont, N. H., and was thence called to this church Jan., 1889. Residence, 654 John R.; Tuesday evenings.

Church of the Covenant (Presbyterian), Detroit, had its beginning in a large union mission Sunday-school of more than 20 m

years ago. which became the Union Pres. ch., with Rev. L. R. Fox pas tor, and some what recently took its pres ent name. It: handsome property an Russell and Napoleon sts is worth ove \$ 50,000. wholly free of



REV. CHAS. H. M'CASLIN.

debt. The church edifice was built in 1888, with 1300 sittings, 500 in the auditorium and 800 in the Sundayschool, which numbers 500 to 600. Church membership, about 150. vices 10:30 and 7:30 Sunday; S. S. at 2:30; everybody welcome. Pastor Chas. H. McCaslin, b. Salem, Ore., June 13, 1864, graduated McCormick Theol. Sem., Chicago, April, 1890, and was promptly ordained and installed in his present pastorate. Residence, 145 Alfred st.; calls all forenoons except Monday, and Mon. and Wed. afternoons.

Churches.—The annual statistics of The Independent, published last year, show gains of Protestant churches this country for the year re-668,108 members; Cathhes, 421,745; total, 1,089,ported as olic churches, The Methodists gained 256,359; Baptists, 213,702; Lutherans, 98,040; Presbyterians, 48,899; Congregationalists, 16,377; Episcopalians, 9,466. Total members of Christian sects, 21,757,171, including 8,277,039 Catholics, who include entire populations of parishes in All are in 151,261 counts. churches, with 103,303 ministers. In-

Detroit .-- THE DETROIT Churches, JOURNAL attempted to secure permission from every church in Detroit to publish a description of the same, and the portrait, with a biographical sketch, of its pastor; but it has been compelled to omit the very few who declined the Journal's request. Where a description is given without the portrait, it is because the pastor would not consent to supply his photograph. This year the Detroit churches only are represented; next year an attempt may be made to represent the State at large.

Churches, Presbyterian. - The American Presbyterians have 16 churches of more than 1000 members each. largest is Dr. Talmage's in Brooklyn, with 4372 at the latest figures; then Dr. Cuyler's in that city, and Dr. Hall's in New York, with 2350 and 2312. New York has 5 of the large churches, Brooklyn 3, Philadelphia, Chicago, and Rochester 2 each, and Minneapolis and Cleveland 1 apiece.

Cities. Growth of American. — Advance bulletins from the Census Bureau exhibit many interesting facts. In the summary of one by The Interior, city population has increased since 1840 from 8.5 per cent to more than onefourth that of the whole country, there being now 58 cities having populations above 50,000, 28 above 100,000, and 16 above 200,000. Ten years ago only about 22.5 per cent of the population was urban, while there were but 35 cities having populations above 50,000, 20 above 100,000, and 10 above 200,000. In 1880, moreover, only 14.1 per cent of the total population lived in cities of 50,000 or more, while now these cities contain 11,740,118, that is, 18.8 per cent, or nearly one-fifth of the whole population, a number larger than was accredited to all the cities of the country above 8000 ten years ago. There now live in cities above 200,000, 8,029,748 people, a number but 42,000 less than contained in all the cities above 8000 in 1870, and the cities above 400,000 now house more people than lived in all the towns and cities above 8000 in 1860. The population gathered in cities above 8000 in 1840, estimated at 8.5 per cent of the total population, was only half as large as that now congregated in cities of 1,000,000 inhabitants or more. while in 1790 the urban population was but 3.3 per cent of the whole. Of cities

having a population above 1,000,000 there are three, New York with 1,513,-501 inhabitants, Chicago with 1,098,-576, and Philadelphia with 1,044,894, with a percentage of increase during the decade of 25.4, 118.3, and 23.3 respectively. Chicago shows the largest percentage of increase, as well as the largest aggregate increase, having more than doubled its population since 1880, that is to say, having added to itself two cities each somewhat larger than that of Buffalo. Its proportionate increase has, however, been exceeded by a number of smaller cities, Omaha, for example, having more than quadrupled its population, Minneapolis and Denver having tripled, and Kansas City more than doubled during the decade. A remarkable growth is also noted in Lincoln, Neb., which now has 55,491 inhabitants, an increase of 326 per cent; and there are several other cities of the same class showing a like wonderful expansion. Nearly all the larger gains are in western cities or cities on the lakes, a fact which goes to show that the trend of immigration and commerce is still, sectionally speaking, east and west rather than north and south. cities making the greatest increase are on the great interior waterway of the lakes or at the junction of great trunk lines of railways, Chicago being a fair sample of the first-class and the heavy gain of St. Louis doubtless being due rather to its position as a railway center than to its facilities for water shipments. The latter theory is borne out by the fact that New Orleans and Cincinnati, with their access to rivers, gain only eleven and sixteen per cent respectively. while Toledo and Cleveland, with both lake and rail facilities, gain over sixty The cities forming the first per cent. markets for the agricultural products of the West, and those located on the leading transportation routes to the seaboard, show the largest increase of population, and will doubtless continue to do so.

Citles, Popular Names of.—Page 78 of our Year-book for 1889 comprises a number of American city nicknames. Some additional soubriquets for cities named there are the following: Boston, the Puritan City; Cincinnati, the Paris of America; Indianapolis, City of Concentric Circles; Lowell, the Manchester of America; New York, Metropolitan City; Philadelphia, City of Homes; Pittsburg, Birmingham of America; Salt Lake City, City of the Saints.

Among cities not mentioned in the list of '89 are these: Akron, O., Summit City; Birmingham, O., Brantown; Dayton, O., Gem City (also Quincy, Ill.); Hannibal, Mo., Bluff City; Kalamazoo, Mich., Celeryville; Lynchburg, Va., Hill City; Paterson, N. J., the Lyons of America; San Francisco, Frisco, Golden City; Salem, Mass, City of Peace; Streator, Ill., City of the Woods; Toledo, O., Corn City; Vincennes, Ind., the Old Post; Xenia, O., Twin City; Zanesville, O., City of Natural Advantages. Foreign cities: Aberdeen, Granite City; Alexandria, Delta City; Athens, City of the Violet Crown; Baalbec, City of the Sun; Brussels and Milan, Little Paris; Cairo, City of Victory; Cork, Drish en City; Damascus, Eye of the East; Edinburgh, Maiden town, Northern or Modern Athens, Athens of the North; Gibraltar, Key of the Mediterranean; Havana, Pearl of the Antilles; Jerusalem, Holy City, City of Peace, City of the Great King; Leipsic, Town of Limetrees; Limerick, City of the Violated Treaty; London, City of Masts, Modern Babylon; Quebec, Gibraltar of America; Rome, Eternal, Nameless, or Sevenhilled City, Queen of Cities, Mistress of the World; Sodom and Gomorrah, Cities of the Plain; Venice, Queen City of the World, Bride of the Sea; Winnipeg, Gate City of the Northwest.

Clinton-ave. Baptist Church, Detroit, organized Nov. 30, 1880, with 52 members. Its sanctuary, dedicated 1885, is

situated on Joseph Campau and Clinton aves., 1} miles east of the City Hall, and cost about \$26,000. It seats about 600; membership, 295. Sunday services 10:30 and 7:30; visitors welcome to all. Rev. C. C. Smith, pastor, born



REV. C. C. SMITH.

E. Va., Sept. 29, 1842, entered the ministry May, 1875, and assumed his present pastorate in May, 1890. Residence, 698 Croghan; calls any secular day from 9 to 2.

Coal.—Officers of the Government Geological Survey figure that the area

in Colorado where coal has already been | developed covers as least 1,000,000 acres, and estimate the entire coal-bearing tract of the State at more than 26. 000,000 acres, a surface as large as England.

Coat.—The history of the little Mshaped nick upon the lapel of coats is When the first Nagiven as follows: poleon gave way to his ambition, he tried to implicate General Moreau in Pichegru's conspiracy. Moreau had been Napoleon's superior and was very popular, but under the circumstances, as Napoleon was on top, it was not safe publicly to express any sympathy with Moreau; so his admirers secretly agreed to nick their coat-lapels to show who Carefully note the first they were. coat-front you see that is well-fitted and buttoned, and see if you can not plainly detect the letter M in its wind-The M will appear upside-down, the little nicks forming its sides. M is the initial letter of Moreau, and his champions were known by the nicks in the lapels of their coats.

Coins.—A good way to send them through the mails is to cut a piece of thick pasteboard to fit evenly in an envelope, make a slot or depression in it just the size of the coin to be sent, insert the coin, and put a wafer or paste a bit of thin paper over it.

College Graduates.—Contrary to the popular impression, a large share of successful men in public life have been college graduates. In this country it was shown just before the present Administration and Congress came in, that 83 per cent of the Chief Justices of the Supreme Court were graduates; Associate Justices, 73; Speakers of the House, 61; Presidents, 54.5 (now 56.5, or 13 out of 23); Vice-Presidents, 50; U. S. Senators, 46; members of the House, In the last Congress 32 of the 76 Senators, or 42 per cent, were graduates; also one-third of the Representa-Five in eight of the present Cabinet are graduates — Secretaries Blaine, Tracy, Proctor, and Miller, and Atty.-Gen. Noble.

Colors, New.—Eiffel red, a deep brickred, having a dash of terra cotta: buffalo, a rich medium-red; Virgil, a bright shade; rosewood, a purplish red; ten, a flaming shade; imperial, a deep tint; Titian, a yellow-red. Red was the most prominent color of the season, green, lilac, brown, gray, and blue fol-

a grayish green, tilleul a light-yellow green, lizard a bluish tint, linden a pale gray shade, verdette a dark leafgreen, ecorce a grayish-green, Rhone and sage, serpente a blue graygreen, if such a combination can be imagined. Vieux rose remains a famed pink, while rose fane is of the same style though brighter. Orchid is a pinkish mauve, veal a reddish pink, and Camilla a very deep shade. is a bluish gray, silver and steel clear shades; boa and serpent greenish grays. Afrique is a red brown, chestnut and Vandyke golden browns, Chataigne a dark oak shade, Kaironan a yellow brown, citron a bright yellow or rouge, a red gold, pearl grayish white, opal milk white, silver-white a pale graywhite, violette purplish lavender, iris blue plum, burned brandy brown lilac, lilac a pale plum, having a tint of pink; Saxe a deep blue, Ciladon a greenish shade, Russian a dark tint, gris bleu a steely blue, granite a gray blue, Quaker a clear shade, Neptune a dark gravish tint.

Columbian World's Fair.—The great Exposition of 1893, celebrating the 400th year after the discovery of America by Columbus, will be held at Jackson Park, Chicago. This city carried off the prize in a sharp contest in the House of Representatives at the last session of Congress, the contestants be-ing Chicago, New York, Washington, and St. Louis. All the world will be invited to send exhibits, and the Fair is expected to be larger and finer than any as yet held, not excepting the magnificent Paris Exposition of 1889. Commissioners have been appointed from all the States, headed by Hon. Thomas W. Palmer of Michigan, Presdent of Commission; and an auxiliary board of ladies has also been chosen, of which Mrs. Bagley, of Detroit, widow of the ex-Governor, is a member. Congress has made liberal appropriations; Chicago has raised its guarantee fund to \$10,500,000; and all arrangements are progressing most hopefully.

Congress.—The number of members of Congress from the adoption of the Constitution to the present time has been: First and Second Congresses, '89-'93, 26 Senators, 65 Representatives; Third to Seventh, 1798–1803, 30 and 105; Eighth to Twelfth, 1803-13, 32 and 141; Thirteenth to Seventeenth, 1813-23, 34 and 181; Eighteenth to Twentylowing. Cythere is a pale green, reseda second, 1823-33, 48 and 213; Twenty-

third to Twenty-seventh, 1833-43, 48 and 240; Twenty-eighth to Thirty-second, 1843-53, 52 and 223; Thirty-third to Thirty-seventh, 1853-63, 66 and 237; Thirty-eighth to Forty-second, 1863-73, 76 and 293; Forty-third to Fortyseventh, 1873-83, 76 and 293; Forty-eighth to Fiftieth, 1883-89, 76 and 325. North and South Dakota, Montana, and Washington added 8 Senators and 5 Representatives; and Wyoming and Idaho will add 4 and 2, or 88 and 332 in The rate of apportionment or representation in the House was 30,000 of population to March 4, 1793; 33,000 to March 4, 1813; 35,000 to March 4, 1823; then, at regular intervals of ten years, 40,000, 47,700, 70,680, 93,423, 127,381, 131,425, and 151,912, at which it remains till March 4, 1893, when there will be a new apportionment under the Eleventh Census. Under the figures of 1843 and since, Michigan had 3 Representatives to '53, 4 to '63, 6 to '73, 9 to '83, and 11 since. The number of ex-Union and Confederate soldiers in the present (Fifty-first) Congress is, in the Senate, 15 U. and 22 C.; in the House, 85 U., 59 C.; in both, 100 U., 81 C.; total, 181.

Corn-palaces.—The corn-palaces of Sioux City, Io., have been famous among the agricultural and industrial exhibits of late years. The first was built in 1887, and cost \$30,000; the second (1888) cost \$60,000; and the third (1889) was 240 by 120 feet, with central tower 200 feet high. The buildings are entirely covered by stalks, husks, and ears of corn, white, yellow, purple, and red, in various artistic and showy designs. They have been very extensively visited.

Copyright.—Apply for copyright be-fore publication, to the Librarian of Congress, Washington, D. C. Send a type-written or printed title-page (or if not book, the title) and for recording and Place upon a copy to the applicant. title-page or the next page of book or pamphlet, or somewhere on map or other production, words and figures similar to these: "Copyrighted, 1891, by J. Smith." Careful observance of this form, or the old longer one, is necessary. Use of these words before copyright subjects the offender to a find of \$100. When the publication is out, send two copies of best edition to the Librarian of Congress. Copyright runs for 28 years, and may be renewed for 14 years.

Corporal Punishment.—It is said, but we think rather doubtfully, that only five of our States are left in which a teacher may legally inflict bodily punishment upon a pupil. Michigan is one of them, however, although such punishment is not expressly provided for in the law.

Cotton.—The total cotton crop of the United States for 1890 amounted to 7,811,322 bales, exceeding the largest crop ever before grown by 265,489 bales, and the crop of 1889 by 373,032. Of this 546,363 were consumed in the South, against 481,235 in 1889. There are 270 cotton mills in operation in the country, of which 33 are in the South.

Crosses on Flags.—The original cross of St. George, on the English flag, was red on a white field; St. Andrew's, Scotch, white on blue; and St. Patrick's, Irish, red on white. The English and Scottish crosses were united on the flag by James I. St. Andrew's and St. Patrick's were combined in 1801, St. Andrew's and are now represented on the "Union Jack" by the broad white band of the saltire, or diagonal cross, upon the blue field, for the former, and the red band with narrow white edge for the latter. The cross of St. George upon the Jack is still red, but also with a narrow white edge representing the original

Cubic Foot.—Weights: Cork, 15 lbs.; tallow, 59; loose earth or sand, 95; common soil, 124; strong soil, 127; brick, 125; clay, 135; clay and stones, 160.

Date-Figuring.—An interesting method of finding the day of the week, when the rest of a date is given, was contained in the Journal Year-book for 1889. A similar way is this: Take the last two figures of the year, add a quarter of this, disregarding the fraction, if any; add the date of the month, and then the figure in the following list, one figure standing for each month, 3-6-6-2-4-0-2-5-1-3-6-1. Divide the Divide the sum by 7; the remainder will give the number of the day in the week; if no remainder, the day is Saturday. example, take July 4, 1890,—90, 22, 4, and 2, equal 118. Divided by 7, the quotient is 16 and remainder 6, which indicates Friday, the actual day of the Fourth.

Days, Longest.—At New York, about 15 hours; Montreal, 16; London and Bremen, 16½; Hamburg and Dantzic, 17; Stockholm, 13½; St. Petersburg and Tobolsk (Siberia), 19; Tornea, in Fin-

land, nearly 22 (Christmas, less than 3); Wardbury, Norway, 2 months and 1 day; Spitzbergen, 31 months; the the North Pole, 6 months, with 6 months night.

Death-roll of 1890.—See Appendix.

Debts, Public.—The public debt of Paris amounts to 790 francs for every man, woman, and child of its population; Frankfort, 317 francs per head; Milan, 218; Berlin, 154; The Hague, 136: Brussels, the most heavily indebted of all European cities, 1605. France pays annually in interest upon her pub fic debt, \$258,000,000; Great Britain, \$130,800,000; Austro-Hungary, \$126,-000,000; Italy, \$100,000,000; Russia, \$220,000,000; and Spain, \$56,000,000. Prussia alone of the German states pays \$44,000,000. The United States are now paying but \$35,000,000. Canada, with but one twelfth of the population, pays nearly one-third as much annually in interest, or \$10,000,000.

Detroit.—The year 1700, before Detroit was settled. Robert Livingston wrote to Lord Bellomont, submitting a proposal to build an English fort here, that the site was "called by the French DeTroett, the most pleasant and plentiful inland place in America by all relation, where there is arable land for

thousands of people."

By the census of 1890 Detroit has 205,699 population, an increase of 89,-329, or 77.94 per cent, since a populabelieved, however, to have a populaeither figures, it is fifteenth of American cities in order of population, advanced from eighteenth in 1880. It is about 61 miles long by 31 broad, and has a river front of 7 miles; covers 23 square miles in area, or 14,720 acres; has 65 miles of street railway, with 95 miles of track, 12 miles of boulevard. and 140 miles of paved streets, 5 with stone and with asphalt, besides 5 contracted. Its net public debt is \$1,634,-500; assessed valuation, real \$123,391,-610, personal \$38,436,960, total \$161,-828,570; rate of taxation, \$1.57 per \$100 valuation. Valuation of the city, as equalized at the last meeting of the Board of Supervisors, and taxation (except city) for the next year: First ward, \$28,058,187, \$65,019.70; second, \$39,125,217, \$90,665.43; third, \$5,865,419, \$13,591.88; fourth, \$11,-691,690, \$27,093.26; fifth, \$6,601,563, \$15,297.80; sixth, \$6,504,824, \$15,-073.67; seventh, \$5,429,123, \$12,581.02; | from 2 to 5.

eighth, \$5,547,041, \$12.854.15; ninth, \$5,763,981, \$13,356.88; tenth, \$5,461,-336, \$12,655.58; eleventh, \$4,141,167, \$9,596.60; twelfth, \$4,782,099, \$11,-\$3,959,863, thirteenth, 081.75; \$4,554,167, \$10,-176.10; fourteenth, 553.09; fifteenth, \$3,706,215, \$8,588.30; sixteenth, \$2,801,546, \$6,492.04. Totals, \$143,993,448, \$333,677.25.

Of the official boards of the city, the Boards of Education and of Estimates are elected by the people from the severally; the Metropolitan wards, Police Commissioners are appointed by the Governor of the State; and the Public Library Commissioners appointed by the Board of Education. All other Boards of Public Works, Fire, Water, Park and Boulevard, Poor, Building Inspectors, and Inspectors of the House of Correction, are appointed by the Mayor and confirmed

by the City Council.

The principal public services of the city are the Police, Fire, and Water Departments, and the Public Library. A "Municipal Improvement Association" has lately been formed, to secure if possible ownership of the public lights, street-car lines, etc., by the city government. The Police Department consists mainly of 28 roundsmen at \$900 a year (2 serving as detectives receive \$1000 each), 310 patrolmen at \$800 (6 acting as detectives and one as harbor-master have \$1000), 1 as city sealer \$960, and 6 precinct officers (\$900), 14 doormen at \$700, 3 signal time-keepers at \$600 and \$360, 1 as sistant clerk, 2 hostlers at \$600, 1 janitor at \$540, and 1 harbor-master's boy at \$360. The Fire Department has a paid force of 261 men, in charge of 15 steam and chemical fire-engines, 6 hookand ladder trucks, and 4 supply wag-Several engines, hose-carts, etc., and 1 fire escape, are kept in reserve. The fire-alarm telegraph has 346 miles of wire and 226 alarm-boxes; streethydrants number 1828, and reservoirs **4**20. The Public Library includes about 100,000 bound volumes and 12, 000 pamphlets; is open 8 A. M. to 9 P. M., except Sundays and holidays, and is free to all residents of Detroit above 14 years old; the reading-room, with 31 dailies and 213 weeklies and magazines, is free to strangers as well as citizens, and is open every day in the year, on Sundays and holidays from 2 to 9 P. M. The Scientific Museum attached is open every secular afternoon

The water service of the city had Nov. 1, 1890, a total pipeage of 367 Two large mains from the pumping-works, each of 42 inches diameter and an economic capacity of 20,000,000 gallons daily, supply the city. Over 51,000,000 gallons have been forced through them on occasions. The works are on the Detroit river, four miles from the City Hall, and contain three engines with an aggregate daily capacity of about 78,000,000 gallons, and eight boilers. The average number of gallons supplied daily to Nov. 1, 1890, was 34,087,621, which is 1,187,257 less than the general average of 1889, and 5,810,095 less than that of 1888. The valuation of the works Jan. 1, 1890, was \$3,410,910, on a careful inventory at present valua-tions, not estimated as formerly. To this about \$300,000 has been added the present year.

The principal points of interest in and about Detroit are as follow:

Historic: Sites-Fort Pontchartrain, Cadillac's foundation of Detroit, below Jefferson av.. near Michigan Exchange, about the corner of Woodbridge and Wayne. "Pontiac Gate." of Woodbridge and Wayne. "Pontiac Gate," at First National Bank. Jefferson and Griswold. Fort Shelby, Fort st. west and Shelby. Fort Croghan or "Nonsense," Park and High. Campau house, 140 Jefferson av. Cadillac or old Cass house, 146 Larned. Hamtranick Campau house, 140 Jefferson av. Cadillac or old Cass house, 146 Larned. Hamtranck house, corner Wesson place, East Detroit, is a well-kept example of the old French dwelling, which Col. Hamtramck owned and in which he died, April 11, 1803. Bloody Run and remnant of Pontiac tree, Jefferson av. High School building, formerly Territorial and then State Capitol, Griswold and State. Grant house, formerly occupied by Gen. (then Lieut.) U. S. Grant, 253 Fort st. east.

Monumental: Cannon from Perry's victory.

Lieut.) U. S. Grant, 253 Fort st. east.

Monumental: Cannon from Perry's victory,
Woodward av., front of City Hall. Soldiers'
and Sailors' Monument, Campus Martius.
Bagley Fountain and Bust. Campus Martius.
Cadillac, Marquette, Lasalle, and Richard

Cadillac, Marquette, Lasulle, and Richard statues, on the City Hall. Elmwood Cemetery, east end (Chandler and other monuments); Mt. Elliott, adjoining (Catholic, Hamtramck buried here); Jewish, also near; Woodmere, west end (also crematorium).

Public Buildings, Works, and Parks: Belle Isle Park and Bridge, head of Detroit river. Grand Circus, four squares above Campus Martius. Cass Park, Second av., between Ledyard and Bagg. Boulevards, north and east sides. Water-works, East Detroit. Police headquarters, Randolph st. Fire headquarters, Larned and Wayne (self-propeller at engine-house head of Griswold). Post-office, custom-house, and U. S. court, Griswold and Larned. Beginnings of new Government Building, Fort at west, Lafayette av. wold and Larned. Beginnings of new Govern-ment Building, Fort st. west, Lafayette av., Shelby, and Wayne. County Jail, Clinton and Beaubien. City Hall and Tower, Campus Martius. Market buildings, Cadillac Square. Libraries, Books, and Art: Public Library and Scientific Museum, Gratiot, near Wood ward; museum open 2 to 5 P. M. Bar Library, Seitz Block, near Post-office. Art Museum, Lefferson and Hastings. Cyclorama, thattle

Jefferson and Hastings. Cyclorama (battle scenes), Bates and Larned. Art stores, Woodward above Campus and Grand Circus.

Book-stores, Woodward, Larned to John R. Second-hand book-stores, Grand River, near Woodward, and 35 Michigan av. Calvert lithographing establishment, Larned and Shelby.

Theatres: Detroit Opera-house, Campus Martius. Whitney's Opera-house, Griswold, above Michigan av. The Lyceum, Randolph, nr. Monroe. Wonderland (dime museum), 78

Woodward.

Commercial: Board of Trade and building, also U. S. Signal Service, Jefferson and Griswold. Hammond Building (ten stories), Gris-wold and Fort st. west. Union Grain Elevator (1,800,000 bushels capacity), Union Depot, Twelfth st. Cleveland steamers, foot of Gris-wold or Shelby. Ferries, foot of Woodward or Joseph Campau. Railway ferries, Central, Milwaukee, and Union depots. Central depot, foot of Third st.

Factories, etc.: Michigan Stove Works, Jefferson and Adair. Peninsular Stove Works, Fort W., 8th to 10th. Detroit Stove Works, Senerson and Adair. Feminsular Slove Works, 1320-60 Jefferson. Michigan Car-works, West Detroit. Peninsular Car-works, Riopelle and D., G. H. & M. R. R. Pullman Palace-car Works, Croghan and St. Aubin av. Bridge and Iron Works, Foundry St. and M. C. R. R. Irush Electric-light Works, Foundry St. and M. C. R. R. Edison Electric-light Works, State and Washington. Detroit Electrical Works, State and Washington. Detroit Electrical Works, Woodbridge and Seventh. Ferry Seed Store, near Lyceum Theatre. Seed farm and garden, Grand River av., near city. Test gardens, Ferry av., near Woodward.

Miscellaneous: Y. M. C. A. Building, Grand River and Griswold. The Detroit Journal office, 40 Congress W. Western Union Telegraph, Griswold and Congress W. Teleplone central office, 68 Griswold. Recreation Park, Brady, between Beaubien and Brush. Athletic Club grounds, 833-65 Woodward. Detroit Statis.

Brady, between Beaubien and Brush. Athletic Club grounds, 833-05 Woodward. Derroit Skating Rink, Larned and Randolph; the Princess, Second, near Grand River, Michigan (Republican) Club-house, 92 Fort W. Light Infantry Armory, Congress east, near Woodward. Light Guard Armory, formerly Fireman's Hall, Jefferson and Randolph. Boathouses, foot of Joseph Campau.

Suburban: Canadian suburbs, particularly Windsor and Sandwich. Inquire for Gen. Hull's headquarters in the war of 1812, etc. Fort Wayne, west end. Glass-works, Delray, below city. Grosse Pointe, above city. Electric railways, east and west enus, and north end Woodward av.

end Woodward av.

The charities of the city are as fol-

Association of Charities, 35 Congress street. Contagious Disease Hospital, Cr wford

Road, near city limits.

Day Nursery and Kindergarten, 55 Church.

Detroit Sanitarium, 250 Fort st. west. Emergency Hospital and Free Dispensary, Michigan av. and Second.

Free Eye and Ear Clinic, Room 8, Market Building

Grace Hospital (homoeopathic) Willis av. and John R.

Harper Hospital, head of Martin Place, near Woodward.

Home for Boys, High st., near Grand River. Home of the Friendless, Warren av., near

Woodward. Home of Industry and Refuge for Dis-charged Prisoners, 641 Beaubien.

Home for the Aged Poor, Dequindre and Scott.

House of the Good Shepherd, 792 Fort st. House of Providence, Infant Asylum, and Lying-in Hospital, St. Antoine and Elizabeth. Industrial School, Grand River and Washington.
Lutheran Deaf and Dumb Asylum, Norris,

near city. Open Door (for fallen women), 223 Park. Protestant Orphan Asylum, 988 Jefferson. Seamen's Home, Griswold and Atwater. St. Authony's Male Orphan Asylum, Gratiot av. near city.

St Luke's Hospital, Churc' Home, and Orphanage, McKinstry av. and Fort st. west. St. Vincent's Female Orphan Asylum,

McDougall av., near Larned.
St. Joseph's Retreat for the Insane, near Dearborn.

St. Mary's Free Eye and Ear Infirmary, Clinton, near St. 'ntoine.

St. Mary's Hospital, St. Antoine, near Gra-

Thompson Home for Old Ladies, Hancock

and Cass. United States Marine Hospital, Jefferson

and Mt. Elliott.

Woman's Hospital and Foundlings' Home, Thirteenth, below Grand River.
Working Woman's Home, Clifford and

Adams.
Zoar Orphan Asylum and Home for the Aged, 248-56 Harvey av., Springwells.

The railways running into Detroit, or reaching it by ferry steamers, are the Grand Trunk, the Canadian Pacific, the Michigan Central (including the Canada Southern), Lake Shore, Wabash Western, Detroit & Bay City; Detroit, Grand Haven, & Milwaukee; Detroit, Lansing & Northern, and the Flint & Pere Marquette. For fuller account of such of these as are Michigan roads, with lists of principal officers, see "Michigan."

[For city government, election sta-

tistics, etc., see Appendix.

Diamonds .- The value of all the diamonds in the world has recently been estimated at \$1,000,000,000. About 8,000 dealers trade in them, carrying a **\$**350,000,000. total stock of about Diamond cutters and polishers number about 4500, chiefly in Amsterdam, Antwerp, and Paris. The finest diamond known is believed to be the Regent, owned by the French Govern-It is very near a perfect brilment. liant, about 1 3-8 inches across, weighs 1361 carats, and is held by experts at 12,000, 00 francs, or nearly \$2,400,000.

Dickinson, Charles M.—This is the man, not the pretty poem entitied "The Children," and giving the reflection was a school-teacher. He was a than man, Charles Dickens. teacher in Eastern New York, and then editor of the Republican in Binghamton, N. Y., where he now lives.

Discoveries by Accident.—Among a number of interesting discoveries made

has proved such an inestimable boon to thousands of sufferers. Dr. Simpson. who was afterwards knighted, set himself to find some anæsthetic to take the place of ether, which had gained a bad name owing to the fact that several deaths had occurred through the careless use of it. Other scientists joined him in his researches, and carefully analyzed every substance which they thought was in the least likely to give the desired result. One night the party were busily engaged in their self-im-They had tested every posed task. substance which had been selected for experiment without anything approaching to a favorable issue, and were beginning to feel disheartened by their lack of success. As one of them was poking about the laboratory to see if he could find anything else which might be put into the testing glass with which each was provided, he happened upon a small bottle of a dark substance which was looked upon more as a curiosity than as possessing any useful properties. With scarcely a thought of success he poured a little of it into each of the tubes, and the members of the party began to inhale it. For a few moments they seemed seized with an unusual gladness, but soon they one after an other fell to the ground, overcome by the powerful fumes. As they gradually came to again they recognized that their search was over, and from that occasion dates the use of chloroform as an anæsthetic.

The rollers which are used to spread the ink with which newspapers and books are printed are the outcome of an accident. In days gone by pelt-balls were used for this purpose. A Shropshire printer was unable to lay his hands upon the pelt ball with which he wanted to ink the type. He was pressed for time, and caught up the first thing that seemed to him capable of serving the purpose of the missing pelt-ball. This happened to be a piece of glue which had fallen from the glue pot, and which did the work so effect ively that he mentioned his improvi ation to his fellow-workmen. Experi ments followed, and it was soon dis covered that glue, mixed with molasse so give it the requisite consistency, wa the best possible article for this put pose.

Disinfection.—Method of logg, of the Battle Creek Sanitarius The best means to disinfect a root by happy chance is chloroform, which which has been occupied by a co

sumptive or person suffering from any bed by his whiskers, another to air for another day, and then thor- called it. oughly cleansed, the furniture with disinfecting solution, the walls newly kal-somined or papered, and the wood-work covered with fresh paint. It should be prepared previously by having every crack about doors or windows tightly pasted or stopped up. For disinfecting clothing from the bed and the patient, soak it for four hours in either a solution of corrosive sublimate and water, or the same time in a two-percent solution of carbolic acid. latter is preferred for general purposes; it will not affect the textures, while corrosive sublimate will shrink flannel clothing and make it harsh. If the disease be diphtheria, so rlet fever, or the like, every article of clothing or up holstery which will not wash must be burned, with every book and paper hat has been in the room.

Diseases, Contagious or Eruptive.— The following table is helpful:

DISEASE.	USU	TOMS ALLY AR ON	ANXIOUS PERIOD RANGES		
hicken Pox	14th	day.	10 to 18 d	lavs.	
)iphtheria	2d		2 " 5		
leasles	14th	46	10 " 14	**	
fumps			16 " 24	"	
otheln	4th	44	12 " 20	**	
carlet Fever	4th	4.6	1 " 7	4.6	
mall Pox		4.	1 1 14	**	
phoid F ver		٤.	1 " 28	44	
hoping Cough		"	7 " 14	6.6	

Divorces.—Of the 328,716 granted in day-school ais country 1867-87, 65 per cent were pupils, to wives, 126,676 for desertion, and 25, gether repressions assigned by husbands were that tauilies. The

other infectious disease, is to burn sulcharged by his wife with being "no phur in it. Take a dishpan, place a flat man at all," another had but one button plate in the bottom of it, and on this on his vest and his wife would not let set a kettle containing the proper quanthim go to fires at night, and in one tity of sulphur mixture, equal quanti- case a bride fell in love with a German ties of sulphur and charcoal. Ascer- on the wedding-trip and sat in his arms tain the size of the room, and burn on the train kis-ing him. One of the three pounds of sulphur for every thou-wives seeking divorce alleged that her sand cubic feet of air. Fill the pan with water so that it will come half—that he refused to cut his toe-nails, anway up on the kettle, then turn alcohol other that on his return from hunting or benzine on the mixture, ignite, and he had made her charge upon him like get out of the room as speedily as pos- a dog, and still another that her husband sible. Alcohol is much the best to use; would not wash himself, "thus causing two or three ounces will be sufficient, her great mental anguish," and finally for several pounds of sulphur. Let the one who convicted her spouse of coming room remain closed for about twenty home late at night and persisting in four hours, and it should be left open talking to her—"mental cruelty," she

> Dollar.—The American standard dollar is made of 3711 grains of pure silver and 411 grains of alloy, or 4121 grains in all. The gold dollar weighs 25.8 grains, of which 23.22 are pure gold To find the intrinsic or real value of the stand and dollar at any time, ascertain the London price of silver bullion per ounce, and multiply the number of pence in it by 1.69, which will give the value in cents very nearly. A goloid dollar was minted as an experiment in 1873. of which 135 specimens are known. It is composed of one part gold, 16.1 par's silver, and 1.9 copper; is about the size of a silver half-dollar. but thinner and lighter, and of bronze color; and at the time had an intrinsic value of exactly 100 cents.

> (Du'ch) Reformed Church, Detroit, is on Catheri e st., near St. Aubin was organized in 1872 but had only

nominal ex istence muc the tinn until the closs of 1888, whe the pastorati of the present incumbent be The gan. church ha now 70 comm unicant 🕟 and 75 Sun



REV. DIRK BROEK.

he had been beaten by his wife's bustle, building was erected in 1874, seats 200, nother's wife had pulled him out of and is valued with lot at \$4000. Services

on Sunday at 9:30 and 3; Sunday-school | at 11; catechetical classes 7:30 Friday and 2 on Saturday. Rev. Dirk Brock, pastor, born Nieuw Leuzen, Overyssel, Netherlands, Feb. 5, 1835, came to America in 1847 with his parents, among the first of the Holland colony in Western Michigan; studied at Holland Academy, now Hope College, Rutgers College, and New Brunswick Theological Seminary, was ordained in 1865, and has since ministered to churches at Graafschap, Saugatuck, Coopersville, and Holland. Mich., Cleveland, O., and Detroit. Residence, 234 Sherman st.; receives calls 10 to 12 Tuesdays and Thursdays.

Drunken Man, how to Arouse.—An experienced police officer says the most effective way is to pinch him under the arms, which has been known to succeed when all other efforts have failed.

Earth, Rotundity of the.—A new and striking proof of this has been discovered at the University of Palermo, near the Mediterranean Sea. Many photographs taken of the sun reflected from the water-surface a few minutes after rising or before setting, show a smaller diameter in the plane of reflection of the reflected image than of the direct. This is due to the convexity of the surface, forming a cylindrical mirror, and the amount of flattening observed is said to accord well with the measure demanded by the earth's rotundity and the theory of the case.

Easter Sunday.—There is an astonishing variety in the dates upon which this day occurs. Between 1803 and 1886 inclusive every day in April was taken for it, save the last five, and eight days in March, 22d to 31st, except the 24th and 29th. March 22 is the earliest and April 25 the latest date, covering 35 days. It came five times each April 16 and 19; four times March 31 and April 1, 2, 11, and 12; and three times March 27 and 28, and April 4, 5, 6, 7, 8, 10, 13, 14, and 22. It falls upon the following dates during the next ten years: 1891, March 29; 1892, April 17; 1893. April 2; 1894, March 25; 1895, April 14; 1896, April 5; 1897, April 18; 1898, April 10; 1899, April 2; 1900, April 15.

Echoes, Remarkable:—One in Fairfax county, Va., repeating flute notes distinctly, but often pitched higher by a third, a fifth, or an octave, according to states of the air. Alpine echoes of the shepherd's horn die away in succes-

sive reflections, each softer and more flute-like than the next preceding. Near Coblenz, Prussia, an echo repeats 17 times at unequal intervals, sounding low, soft, right, left, in unison, or different by a third, fifth, or tenth. Lake Killarney echo follows with a capital second any simple tune on the bugle. One near Glasgow repeats thrice a few notes of a trumpet, first a third lower, each following time lower still. Another between the wings of a castle near Milan repeats a pistol-shot times. The famous echo at the tomb of Metella, near Rome, repeating an hexameter line requiring 2 1-2 seconds to speak it, is thus found to originate 1500 feet from the speaker.

Eggs.—According to naturalists, a scorpion will produce 65 young; a common fly will lay 144 eggs, a leech 150, and a spider 170. An hydrachna produces 600 eggs, a frog 1100, a female moth 1100, and a tortoise 1000. A gall insect has laid 50,000 eggs, a shrimp 6000, and 10,000 have been found in the ovary of an ascaris. One naturalist found over 12,000 eggs in a lobster, and another over 21,000. An insect very similar to an ant has produced 80,000 eggs in a single day, and Leuwenhoeck seems to compute 4,000,000 for the crab. Many fishes produce an incredible number. More than 36,000 have been counted in a herring, 38,000 in a smelt, 1,000,000 in a sole, 1,130,000 in a roach, 3,000,000 in a sturgeon, 342,000 in a carp, 383,000 in a tench, 546,000 in a mackerel, 992,000 in a perch, and 1,357,000 in a flounder. But of all fishes the cod seems to be most prolific. One naturalist computes that it produces than 3,686,000 eggs, and another as many as 9.444,000. A rough calculation has shown that, were 1 per cent of the eggs of the salmon to result in fullgrown fish, and were they and their progeny to continue to increase in the same ratio, they would in about six years amount in bulk to many times the size of the earth. Nor is salmon the most prolific. In a yellow perch weighing 31 ounces have been counted 9943 eggs, and 25,141 in a smelt ten inches and a half in length. An interesting experiment was made in Sweden in 1761, obtaining from 50 female breams 3,100,000 young, from 100 female perch 3,215,000, and from 100 female mullets 4,000,000.

to states of the air. Alpine echoes of the shepherd's horn die away in succestroit, was a mission of the Lafayette-

ave. (now Woodward-ave.) ch., organ-

ized July, 1880, Rev. Frank В. Cressey, first pastor. Its house is a frame building at 18th and Porter sts., seats 550, and is valued at \$7000. Membership, 323. Sunday services— morning prayers at



10, preaching REV. W. H. STIFLER.

10:30 and 7:30, Sunday-school at 12 and 3; young people's meeting Tuesday evening, prayer-meeting Wednesday evening, teachers' meeting Friday evening. A monthly church paper is issued.

Rev. W. H. Stifler, D. D., pastor, born near Hollidaysburg, Pa., March 25, 1841, grad. from Shurtleff Coll. and Theol. Sem. 1869. was ordained pastor at Pana, Ill., June 13, '69, was subsequently pastor at Davenport, Io., and elsewhere, and his present work began Oct. 9, 1887. Residence, 234 Twentieth St.; "at home" Thursdays, 4 to 8 P. M.

Electricity.—Some definition of electrical units was made in the Year-book It has since been proposed similarly to perpetuate the memory of American electricians, as Franklin and Henry, by attaching their names to other units yet unnamed; and it is thought that at the meeting of the American Meteorological Society this year one of these honored names will be given to the unit of induction. The most powerful electric light in the world is believed to be that of the Houstholm lighthouse on the Jutland coast, North of Europe, with 2,000,000candle power, and visible 40 miles. The two largest dynamos are in London, each with an engine of 5000 horsepower and a similar one in reserve, making a possible total for each of 10,-000 horse-power, or 200,000 lights. An Englishman named Webster has successfully applied electricity to the purification of sewage-water, and a New Jersey inventor thinks the dynamo may be successfully used in war to make artificial lighting, claiming himself to produce an effective flash against a body of men a mile distant.

Elements.—Seventy-two elements are now recognized in the material constitution of the world, all but 17 of which are metallic. A number of claimants to recognition are not yet sufficiently known to be admitted. Discovery is reported of a new element found in an extinct crater in Damaraland, and hence called damaria. It is said to have an atomic weight of but 0.5, or half that of hydrogen, and so is the lightest known substance, if its existence is established.

England, Kings and Queens of.—The following useful old rhymes, giving the succession of English sovereigns, may be new to some of the younger generation:

First William the Norman, then William his son; Henry, Stephen, and Henry; then Richard and

John; Next Henry the Third, Edwards one, two, and three;

And again, after Richard, three Henrys we see.

Two Edwards, th'rd Richard, if rightly I guess;
Two Henrys, sixth Edward, Queen Mary,

Queen Bess;
Then Jamie the Scotchman, then Charles whom they slew,

Yet received, after Cromwell, another Charles

too.

Next Jamie the Second ascended the throne,
And good William and Mary together came
on:

Then Anne, Georges four, and fourth William all past,
God gave us Victoria — may she long be the

God gave us Victoria,—may she long be the last!

A later and better jingle tells how the sovereigns died:

William the First got a bruise from his horse, A random-shot arrow made Rufus a corse; Henry the Clever on fish too well fed, Stephen of Blois died quiet in bed; Henry the Second of grief broke his heart; Cœur de Lion got killed by a dart, John by the fever—and nobody sighed; Henry of Winchester naturally died; Edward the First died marching to fi ht, Edward the Second was nurdered at night; The warrior Edward passed calmly away; Richard, deposed, was starved out of the way; Henry the Fourth died of fits to excess, Henry the Sixth died of grief in the Tower, 'T was lust brought Edward the Fourth his last

hour; Edward the Fifth, in the Tower too, was killed

By Richard the Third, slain at Bosworth Field; Henry the Seventh owed death to the gout, Disorders untold put his namesake to rout; Edward the Sixth died a natural death, Mary in quietness exhaled her last breath; Queen Bess closed in anguish an ill-spent

reign, Scotch James the First passed away without

p in; The First King Charles died under the knife, Charles his son passed off without strite; His second son James died exiled from his throne, William the Third broke his right collar-bone; R. I., and has since served important Queen Anne very suddenly went to her doom, Apoplectical fits sent King George to the tomb:

King George the Second turned out in a rage His long-reigned successor slipped off in old

The Fourth King George and William his brother

With an osseous heart left this life for another; Victoria reigns, so good and wise, And she'll be greatly missed whenever she

dies.

English Investments in the United States of late years have become enor-In breweries alone one London syndicate by the close of 1889 had placed no less than \$83,380,000 in this country, besides \$6,200,000 in Toronto; and another, having the enormous capital of \$100,000,000, had invested \$40,-000,000 here, mostly in breweries. About \$50,000,000 were said to be involved in the purchase of the great Pillsbury and Washburn grist-mills Minneapolis, with elevators and in Books, celluloid. properties. other coal-mines, cotton-mills, dry goods, gas and water and iron works, patent leather, phosphate, proprietary medicines, sugar, and other American industries, have invited or secured large The total blocks of British capital. sum is unknown, but to Jan. 1, 1890, it is believed that large part of \$320,-000,000 known to have been handled by the London syndicates had come to the United States.

Epiphany (Reformed Episcopal) Church, Detroit, will presently occupy its new and beautiful Gothic stone

building at Trumbull and Myrtle aves., costing with site, organ and chime of 12 bells, stone rectory, and parish house, upwards of **\$**100,000. The parish was organized about ten years ago, and has



REV. G. W. BROWN.

dou bled membership under the present Rector, Rev. G. W. Brown, M. D., who took his pastorate here Dec. 18, 1888.  $_{
m He}$ was born at Westbrook, Me., 64 years ago, was ordained deacon and presbyter graduated at the General Theological

parishes in New England, Pennsylvania, and Chicago. Sunday services 10:30 Wednesday evening, 7:45; and 7:30; Bible-class Friday evening, 7:45. All seats free. Rev. Fred'k Woolfenden, Ass't Minister. Dr. Brown's residence, 591 Grand River ave.; at home Wednesdays.

Episcopacy came early to Michigan, Church of England services being held in the British garrison at Detroit, after

the occupation in 1765. Lay reading was a fterwards maintained until the War of 1812, and the first missionary of the faith reached Detroit 1824, reporting three com. municants in July, in. creased to



BISHOP DAVIES.

i n December. The Church is now one of the strongest in Detroit, where it has 23 churches and missions. The State is divided into two dioceses, of Michigan Western and The sole Michigan. Bishop of Michigan was the Rev. Dr. Sam'l McCoskry, consecrated 1836, and remaining in office until after the division of the diocese (1874), resigning in 1878. Bishop Sam'l S. Harris was consecrated the next year, and died in office 1888. The Rt. Rev. Thomas Frederick Davies, D. D., LL. D., third Bishop of Michigan, was born in Fairfield, Conn., Aug. 31, 1831; was graduated from Yale in 1853 and from Berkeley in 1856, ordained by Bishop Williams to the diaconate in 1856 and to the priesthood in 1857; Professor of Hebrew at Berkeley 1856-62, Rector of St. John's, Portsmouth, N. H., 1862–68, and of St. Peter's, Philadelphia, from 1868 until his elevation to the Episcopate. He has served with distinction on many important committees, and on the Board of Missions; was consecrated Bishop of Michigan in St. Peter's Church, Philadelphia, Oct. 18, 1889. The Rt. Rev. George D. Gillespie, S. T. D., first Bishop of Western Michigan, was born in Goshen, N. Y., June 14, 1819; 1861, by Bishop Clark, of Providence, Seminary 1840; ordained Deacon June

28, 1840, by Bishop De Lancey; successively rector of St. Mark's, Leroy, N. Y., St. Paul's, Cincinnati, O., Zion, Palmyra, N. Y., and St. Andrew's, Ann Arbor, Mich., where he remained until his elevation to the Episcopate; received degree of S. T. D. from Hobart College, Geneva, 1875; consecrated first Bishop of Western Michigan in St. Mark's, Grand Rapids, Feb. 24, 1875, by Bishops McCoskry of Michigan, Talbot of Indiana, Bissell of Vermont, Robertson of Missouri, Littlejohn of Long Island, Padodck of Massachusetts, and Welles of Wisconsin. The Bishop has been among the foremost, and one of the most active in prison reform.

Eras, the Famous. -- The era Abraham began Oct. 1, B. C. 2016.

The era of Augustus began in the year of Rome 727, twenty-seven years before the Christian era.

The era of Tyre began B, c. 125, in the year of Rome 628, and in the 186th of the Seleucidæ or Grecian era.

The era of Antioch fixed the creation c. 5492. After 285, however, it coincided with the Alexandrian era.

The era of the Hegira dates from the flight of Mohammed from Mecca to Medina, on the 15th or 16th of July, A. D. 622.

The Chinese era begins B. c. 2277, but since the year 163 B. C. Chinese writers have dated the year from the accession of the reigning emperor.

The Cæsarean era of Antioch was instituted in consequence of the victory of Pharsalia, gained by Julius Cæsar in the year of Rome 706 and B. C. 48.

The era of Nabonassar began Feb. 26, B. C. 747. It continued until the death of Alexander the Great, and was thence brought down to the reign of Antoninus Pius.

The Hindoo era is quite complicated, and its elucidation has given rise to much controversy. The current era-the fourth-of the world's existence, the Kall-yug, began B. C. 3101.

The French Republic era began Sept. 22, 1792. The Republican calendar was first used Nov. 26, 1793, and was discontinued Dec. 31, 1805, when the Gregorian was resumed.

The Persian era began on the accession of King Yezdegird to the throne of Persia, June 16, A. D. 632. The Persian year was readjusted 1075, and the 1887; Emmaus Evangelical, Twelfth system continues to the present time. and Lysander sts., 1889. Sunday

The Jewish era was adopted in the fifteenth century. The Jews date from the creation of the world, which they Germany Aug. 15, 1839; graduated

place 3760 years and 3 months before the Christian era.

The Alexandrian era of the creation of the world was fixed at 5502 years B. c., so that A. D. 1 corresponds with the Alexandrian year of the creation 5503. This computation was continued until the year A. D. 284, but the next year ten years were subtracted.

The era of Spain began at the conquest of that country by Augustus, B. c. 38. It was adopted in Portugal, Africa, and the southern provinces of France. It was abolished in Catalonia in 1180, in Aragon 1350, Valencia 1358, and Castile 1393, but prevailed in Portugal as late as 1415 or 1422.

The Grecian era commences in the year of Rome 442, twelve years after the death of Alexander, B. c. 311. This era is still in use among almost all the people of the Levant. The Jews, when they became subject to the kings of Syria, adopted it, and did not abandon it for the one now used by them until within the last 400 years.

The era of Constantinople, which was adopted in that city before the middle of the seventh century, likewise commenced with the creation of the world, which is assigned to B. c. 5508. The Russians followed this calculation until the reign of Peter the Great, having received it from the Greek church, by which it is still used.

Evangelical Lutheran Church, Seventeenth and Pine sts., Detroit, organized Aug. 27, 1865; dedicated first building

Nov. 5, 1865 on Trumbull near Michigan ave., removing to present site 1871. where the new church was dedicated Jan. 12, 1873 Size, 112 by 48 feet, with gallery; seating capacity. 900; com municants 1286. Off.



REV. K. L. MOLL.

Zion shoots: Evangelical church, Welch ave., 1882; Bethlehem Evangelical, McKinstry ave., services at 10 and 2:30.

Rev. K. L. Moll, pastor, was born in

Louis, Mo., 1864; was ordained June, 1864, at Riverdale, Ill., and came to Detroit Feb. 6, 1866, as first pastor of this church. Residence, 428 Seventeenth st.

Events of 1890.—See Appendix.

Execution, Methods of.—Executions are public in Austria, the Netherlands, and Portugal, by the gallows; in Russia, by gallows, musket, or sword; Ecuador and Oldenburg, musket; fifteen cantons of Switzerland, sword; China, sword or cord; Spain, the garrote: Belgium, Denmark, France, two cantons of Switzerland, the guillotine. Private executions, in two cantons of Switzerland, Bavaria, Hanover, and Saxony, by the guillotine; Great Britnin and the United States generally by the gallows, except in New York by electricity; Brunswick, by the axe; Prussia, by the sword. Capital punishment has been abolished in Italy and some of the United States.

Explosives.—The following is a law of Michigan, going into effect Oct. 1,

The People of the State of Michigan enact, That every druggist, grocer, or other person who shall sell and deliver at retail any gaso who shall sell and deliver at retail any gaso-line, benzine, or naphtha without having the name thereof and the words "Explosive when mixed with air." plainly printed upon a label securely attached to such can, bottle, or other vessel containing the same, shall be punished with a fine of not avoading \$400.

with a fine of not exceeding \$100.

Extravagance.—At a ball in New York City, in February, 1888, the walls were lined with roses, at a cost of not less than \$10,000. One lady of fashion puts \$1000 upon the funeral of her poodle dog; another buys \$60 nightrobes, unwashable, and so thrown aside after one brief period of use. One millionaire's palace has a \$40,000 portico; another, on "Nob Hill," San Francisco, a \$60,000 fence; and another, in Syracuse, N. Y., a \$700,000 stable.

Eyes, Care of.—The following is the last and best series of rules that we have

seen in print:

1. Sit erect in your chair when reading, and as erect when writing as possible. If you bend down you not only gorge the eyes with blood, but the brain as well; and both suffer. The same rule should apply to the use of the microscope. Get one that will enable you to look at things horizontally, not always vertic-

ally.

2. Have a reading-lamp for night use. In all reading the light should be on the book or paper and the eyes in the shade. If you or paper and the eyes in the shade. If you have no reading-lamp turn your back to the light, and you may read without danger to your eyes.

8. Hold the book at your focus; if that be-

gins to get far away get spectacles.

4. Avoid reading by the flickering light of the fire.

5. Avoid straining the eyes by reading in the

gloaming.
6. Reading in bed is injurious as a rule. It must be admitted, however, that in cases of sleeplessness, when the mind is inclined to ramble over a thousand thoughts a minute, reading steadies the thoughts and conduces to sleep.
7. Do not read much in a railway carriage.

I myself always do, however, only in a good light; and I invariably carry a good reading lamp with me to hook on behind me. Thousands of people would travel by night rather than by day if the companies could only see their way to the exclusive use of the electric light.

8. Authors should have black-ruled paper instead of blue, and should never strain the eyes by reading too fine types.

9. The bed-room blinds should be red or

gray, and the head of the bed should be toward the window.

10. Those ladies who not only write, but sew, should not attempt the black seam by

night. 11. When you come to an age that suggests the wearing of spec acles, let no false modesty prevent you from getting a pair. If you have only one eye, an eyeglass will do; otherwise it is folly.

12. Go to the wisest and best optician you know, state your wants and your case plainly,

and be assured you will be properly litted.

18. Remember that bad spectacles are most injurious to the eyes, and that good and well-chosen ones are a decided luxury.

14. Get a pair for reading with, and if necessary a long-distance pair for use out of doors.

Fabrics, how Named.—Damask comes from the city of Damascus; satins from Sayton, China; calico from Calicut, India, formerly celebrated for cotton cloth and where the printing of calico was first tried; muslin from Mosolin, Asia; alpaca is an animal of the llama species, whose wool serves to make the fabric also so named: taffetta is entitled for a street in Bagdad; cambric from Cambral; gauze from Gaza; baize from Bajac; dimity from Damietta; jeans from Jean; drugget from Drogheda, Ireland; duck from Torque, Normandy; blanket after Thomas Blanket, a famous clothier connected with the introduction of woolens into England, 1340; serge from zerga, Spanish for a peculiar woolen blanket; velvet from Italian velluti, which means woolly; shawls from the salam, floor, because shawls were originally laid on the floor like carpets; bandana from an East Indian word to bind or tie, because it is tied in knots before being dyed; chintz from the Indian

chott; delaine, French, "of wool."
Faculties, Unknown.—The important suggestion has recently been made that while we have but five senses, others might well be supposed capable of tak ing cognizance of the effect of vibra tions upon the ear or eye, between the 40,000 in a second beyond which

sounds cease to be audible and the 400,-000,000,000,000 which give the sensa tion of red, or the lowest perception of The Popular Science Monthly "We find in animals complex organs of sense, richly supplied with nerves, but the function of which we are as yet powerless to explain. There may be fifty other senses as different from ours as sound is from sight; and even within the boundaries of our own senses there may be endless sounds which we can not hear, and colors as different as red from green, of which These and a we have no conception. thousand other questions remain for solution. The familiar world which surrounds us may be a totally different place to other animals. To them it may be full of music which we can not hear, of colors which we can not see, of sensations which we can not conceive."

Famous People.—Popular names:-John Adams, the Colossus of Independence, John Quincy Adams, the Old Man Eloquent. Sam Adams, the Crom-well of New England. Alexander I., Coxcomb Czar. Aristophanes, Father of Comedy. Attila, Scourge of God. Thos. H. Benton, Old Bullion. James G. Blaine, Magnetic Statesman. John Brown, Old Osawatomie. James Buchanan, Old Public Functionary. Robt. Burns, Ayrshire Bard. John Calvin. Pope of the Reformation. S. P. Chase, Father of Greenbacks. Grover Cleveland, Man of Destiny. Henry Clay, Mill-boy of the Slashes, Great Pacificator. S. S. Cox, Sunset Cox.
Oliver Cromwell, Old Noll. S. A.
Douglas, Little Giant. Benj. Franklin, Poor Richard. J. C. Fremont,
Pathfinder of the Rockies. J. A. Garfield, Teacher-President, Martyr-President. U. S. Grant, Unconditional Surrender. Horace Greeley, Sage of Chappaqua. Alex. Hamilton, Alexander the Coppersmith. W. H. Harrison, Cincinnatus of the West. Washington Irving, Prince of American Letters. Andrew Jackson, Old Hickory, Big Knife. T. J. Jackson. Stonewall Jackson. Thos. Jefferson, Sage of Monticello. Henry Lee, Light-horse Harry. R. E. Lee, Henry Uncle Robert. A. Lincoln, Honest Old Abe, Rail-splitter, Martyr-President. Jas. Madison, Father of the Constitu-tion. Francis Marion, Swamp Fox, Bayard of the South. Ossian, Celtic Homer. Geo. H. Pendleton, Gentle-man George. Jas. K. Polk, Young Israel Putnam, Old Put. Hickory.

deus Stevens, Great American Commoner. Zachary Taylor, Old Rough and Ready. S. J. Tilden, Sage of Greystone. Martin Van Buren, Little Magician. George Washington, American Fabius, Father of his Country. Anthony Wayne, Mad Anthony. Dan'l Webster, Expounder of the Constitution. For nicknames of leading Union Generals, see the Journal Year-book for 1890, page 40.

Farm Products.—Few persons have an adequate concept of the immense annual aggregate of these in the United States, which a competent writer (Mr. Rowland Hazard of Rhode Island) estimates at \$3,600,000,000. The estimated value of the product of Indian corn for 1888 is \$677,561,580; wheat, \$385,248,030; oats, \$195,424,240; potatoes, \$81,413,589; barley, \$37,672,032; rye,\$16,721,869; buckwheat,\$7,627,647; hay, \$408,499,565; cotton, \$292,139, 209; tobacco, \$43,666,665; total, \$2, 145,974,426. Reports of the U.S. Department of Agriculture for the fis-cal year 1886-7 show a product of fruits worth \$175,000,000; sugar and syrup, including honey, \$33,500,000; and from market gardens, \$68,000,000. The agricultural exports of 1889, excluding sugar and molasses, amounted to \$529,747,396, or 72.5 per cent of our total exports.

Farmers' Societies.—A number of these have developed in considerable strength since the Civil War. The best known of them, the Patrons of Husbandry, or Grangers, was organized in 1867. It is not a political society, as are most of the later associations. Agricultural Wheel has for some years been an important, though not a commanding, element in the politics of Ar-In 1873 the National Farmers' kansas. Alliance and Co-operative Union, briefly known as the Farmers' Alliance, originated in Texas. and has of late years become a formidable organization. As a political party it carried the State of Georgia last October by large majorities, electing three-fourths of the Legislature. It is said to be completely organized in every Southern State except West Virginia, last year nominated State tickets in Minnesota and other Northern States, and is full-formed as a party in every Western and Northwestern State but Michigan (where a State Alliance is organized, however), California, Oregon, and Washington. It John Randolph, Political Meteor. Thad | numbers at least 2,000,000 members, ir

about 25 States. It is a secret society, having for leading objects in the North the lending of money by the Federal Government to farmers at a nominal interest; in the South, the "agricultural sub-treasury scheme," or the founding of Government warehouses for the deposit of corn, wheat, oats, cotton, and tobacco, upon which advances of public money shall be made; and generally, the ownership and operation of all railroads by the Government, with other important measures. There are also the National Farmers' League (nonsecret, but political), the Northwestern Alliance, the Farmers' Mutual Benefit Association, and the National Colored Farmers' Alliance. Large numbers of agriculturists are among the Patrons of Industry and other workingmen's societies.

FENCES.

Fences.—The following tables will be found useful:

RAILS AND POSTS FOR EACH TEN RODS OF POST-AND RAIL STRAIGHT FENCE.

Length of Rail, ft. Length of Panel, ft.	Number of Panels, Number of Posts,	Posts.	Rails for each 10 Rods.				
		Five Rails high.	Six Rails high.	Seven Rails high.	Eight Rails nigh.		
10	8	2056	21	103	123	144	165
12	10	1616	17	83	99	116	133
4	12	1334	14	69	84	95	109
1616	1416	111/2	12	57	69	81	98

RAILS, RIDERS, AND STAKES FOR EVERY TEN RODS OF ZIGZAG FENCE

		I.O.	JS UE	LIGLAC	PENCE	•	
Rail, ft.	from e, ft.	anel, ft.	Rails for each 10 Rod				
Length of	Deflection right lin	Length of Panel, ft	Five Rails high	Six Rails high.	Seven Rails high.	Stakes.	Riders (single).
12 14	6	8	103 83	123 99	144 116	42 34 28	21 17
161/2	8	12	69	81	95	28	14

Farms.—Anticipating the conclusions of the Eleventh Census, the total farm area of the country is estimated at 653,-000,000 acres, 370,000,000 of them improved. By the end of the century it is figured that the improved area must be increased to 486,000,000 acres, in order merely to support our population. the whole world the country having the largest ratio of cultivated to uncultivated land is Denmark; the smallest, Russia. Great Britain has 29 per cent tilled, to 71 untilled.

First Congregational Church, Detroit, still occupies the old building at Fort St. west and W yne, but will s on re-

move to its beautiful new edifice at Woodware. and Fores avenues. The church was organizec Dec. 25, 1844 and built it first house of worship (now a carriage warehouse) at Jeffer on ave. and Beaubier st., removing



to its present The building and structure in 1854. grounds cost \$56,000. The Second church, on Woodward ave. and Siblev st., was originally colonized from the First. Pastor W. H. Davis, b. Chelsea. Vt., April 23, 1851, entered the ministry at Beverly, Mass., June, '77, and came to his Detroit pastorate May, 1884. Residence, 17 Joy st.; at home early and late afternoons.

First Baptist Church, Detroit, org. Aug, 1827, with ten members; Rev. Henry Davis, first pastor; first house

dedicated 1834, on the northwest corner of Fort and Griswold sts. The second house on the same lot was occupied in 1863; the third, now occupied on the corner of Cass ave. and Bagg-st., was dedicated in



REV. Z. GRENELL.

1875. Property valued at \$80,000; membership, about 600. Woodward-ave., Twelfthst., Warren ave., and North Baptist churches are the direct offspring of this body Sunday services — morning prayers at 10, preaching service 10:30 and 7:30, S. S. at 12, S. S. prayer-meeting 1:15, young ladies' Bible-class 3:45, young people's meeting 6:30, aftermeeting 8:45. Meetings for prayer and conference Wednesday 7:30, teachers'

meeting and normal class Friday 7:30, prayer-meeting Thursday 7:30 at 7:30 and 8:15. The public are All seats free; everybody welcome. cordially welcome to all; pew-holders freely offer hospitality, and to remove the least occasion for embarrassment no seats are reserved on Sunday evenings. Rev. Z. Grenell, D. D., pastor, b. New York City, Feb. 25, 1841, ordained in Kingston, N. Y., Oct. 24, 1864, pastor there nine years, then for six years in Bay City, Mich., became pastor here July 1, 1879. sides at 193 Charlotte-ave.; prefers to have his mornings unbroken, but is accessible at all times to those who need his services. Telephone number, 4230.

First French Baptist Church, Detroit, was formed in 1856, and with five branches in different parts of the

numbers 264 members. Property, about \$8000. Trustees, Henry Gay, H. Giroux. astor, Rev. R. B. Des Roches, who was born of Mont J. Huard; Montreal in 1826, came to Detroit 1856. was instrumental



REV. R. B. DES ROCHES.

in gathering the French church, over which he was ordained in 1857, and has since remained their pastor. Residence, 93 Sherman st.; at home forenoons.

First German Baptist Church, Jos. Campau ave. and Arndt st., Detroit, was organized in 1864, with about 25

members, and has now 275. Meetinghouse and parsonage erected 1888: value, \$21,-000; sittings in main room 500, with chapel 800. Sunday services 10 and 7:30, Sunday-school at 2; Bible study Tuesday 7:30,



Rev. Reinhard Otto, pastor, was born Dec. 14, 1827, at Schoenberg, Hesse Cassel, Germany, came to America 1849, graduated from Seminary at Rochester 1866, was ordained Nov. 9 same year, and began pastoral labor with this church Aug. 1, 1886. Home at parsonage; receives 11 to 1 o'clock, except Saturday and Monday. First Presbyterian Church, Detroit,

(corporate title of congregation, "The First Protestant Society of Detroit"), is

the mother of 👨 Presbyterianism and all Protestantism in this city, having been organ ized in 1818 Its noble new building, near completion at Woodward ave. and Edmund Place, is of Romanesque architecture,



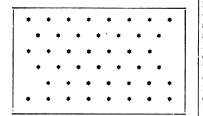
REV. M. A. BROWNSON.

with pyramidal centre and fine clustered turrets. The exterior throughout, church and chapel, is of Lake Superior red sandstone; inside woodwork of oak, antique finish; sittings, 1400; will be completed early in 1891; chapel, seating 800, has been in use for all services since May, 1890. Total cost with ground, \$165,000. Communicant membership Nov., '90, 580; Sunday school, 500. Sabbath services at 10:30 and 7:30; S. S., 12:15; congregational prayer-meeting Wednesday evening. Public always cordially welcomed.

The Rev. Marcus A. Brownson, pastor, was born June 24, 1859, at Washington, Pa.; entered ministry April 28, 1880, and assumed his present pastorate March 16, 1889. Residence, 51 Watson st.; telephone No., 4122.

Flags.—The flag of the United States, "the stars and stripes," or "star-spangled banner," was not fully formed until January 20, 1782, when the war of the Revolution was practically over. It had originally (in 1777) thirteen stars as well as stripes. Each State is entitled to add a star on the Fourth of July next after its admission. Idaho Young People's meeting Wednesday was admitted July 3, 1890, and hence

the flag now legally bears 43 stars. Wyoming's act of admission was not approved until July 10, and her star must wait until next year. When all are in, the "union" on our flag, as fixed by authorities at Washington, will bear them in this fashlon.



In making a national flag, the union or field should be one-third its length, and cover seven stripes in breadth. The stars are five-pointed. The regulation flag for infantry companies, 6 by 6½ feet, offers a good size for ordinary purposes. The red of our flag is held to represent courage, the white integrity of purpose, and the blue steadfastness, love, and faith. A "Presidential flag" was first suggested in 1882 by President Arthur, who himself devised it, and first used it on his sea-trip to Florida the next year. It shows when hoisted the presence of the head of the Government upon a vessel, as other great powers have a royal or imperial ensign, and consists simply of a blue field, with the Federal arms in the cen-

The Confederate flag, or "stars and bars," adopted in March, 1861, bore three horizontal stripes of equal width, the two outer ones red, the middle one white, with a blue square in the upper corner next the staff carrying nine white stars in a circle. In September, 1861, a battle-flag was also adopted, for fear of confusion between the Federal and Confederate flags. It had a red field charged with a blue saltier or St. Andrew's cross, and a narrow border of white bearing nineteen stars. In 1863 the original flag was supplanted by one with a white field, having the battleflag for a union, and afterwards a vertical red bar was thrown across the outer half of the field beyond the union.

Flags are used as symbols of rank and command, officers using them being called flag-officers. They are square, to distinguish them from other banners. To "strike a flag" is to lower the

A "flag of truce" is a white flag displayed to an enemy to indicate a desire for a parley or consultation. It is a sign of peace. After a battle parties from both sides often go out to the field to rescue the wounded or bury the dead, under the protection of a white flag. The red flag is a sign of defiance, often used by revolutionists. In our service it is a mark of danger, and shows a vessel to be receiving or discharging her powder. The black flag is a sign of piracy. The yellow flag shows a vessel to be at quarantine, or is the sign of contagious disease. A flag at halfmast means mourning. Fishing and other vessels return with a flag at halfmast to announce the loss or death of some of the men. Dipping the flag is lowering it slightly and then hoisting it again to salute a person, a body of troops, a vessel or fort.

[See also "Crosses," in this book.]

Flies.—The common house-fly is now well recognized as a carrier of contagion. Even the bacillus of consumption is found in the intestines of flies fed upon the spittle or pus of patients this disease. What is known as granular ophthalmia can be conveyed by them. Malignant pustule has formed on the bite of a horse-The late Father Damien attributfly. ed his leprosy to the inoculation, through the agency of flies, of a small wound on the scalp. escape these insects entirely one must go out to sea, but on land they are least troublesome where there is least filth. Cleanliness in home and premises, therefore, is an important means of prevention against the intruders.

Flower Show. — The Detroit Floral and Musical Charity Festivals of 1889 and 1890 were popularly known by the above name. They were organized and managed by the DETROIT JOURNAL, the entire net proceeds being divided among the co-operating Detroit charities. They were artistic and financial successes, and made so by the very hearty co-operation of the ladies of Detroit, the florists, artists, and musicians; in fact, all who were requested to assume any duty or responsibility, accepted and executed the trust with enthusiasm and The possibility of repeating fidelity. it in 1891 was fully canvassed before the expiration of the last festival, but the ladies generally expressed the desire to let it "rest for at least a year or two." national color in token of submission. The lack of adequate accommodation

will be the greatest difficulty in any future attempt, as the combined rink and armory were insufficient to accommodate the crowds which filled the buildings to the extreme limit of their capacity. When the question of building has been solved, the JOURNAL has a plan which it will submit, that will be an artistic advance upon the last ex-The first festival used only a hibition. selected flower, and the booths were erected to be in accord with the flower. The last exhibition retained the selected flower and added the attractive feature of a selected country as well, which necessitated the building of the booths



in the architecture of these countries, and the ladies costuming in the dress of the countries represented. The next festival could retain each of the former features and add that of the selection by each of the charities of some specific building and event in each country, thereby introducing the historical element. As before stated, when the participants in the last festival are rested and ready, and the proper building accommodations have been found, the DETROIT JOURNAL will be ready to organize the Third Flower Festival. Probably all will agree that it should exceed in attractiveness any of its predecessors.

The First Floral Exhibition April 2, 3, 4, 5, and 6, 1889, was for the benefit of 21 of the Detroit charities. The total attendance was 34,501, and the net cash received from all sources was \$11,- of 1890 will long be remembered as 001.75, or an average of over \$500 for one of the most important epochs of each charity.

The Second Festival, held April 22, 23, 24, and 25, 1890, was for the benefit of 23 Detroit charities. The attendance was 52,286, and would have been several thousand additional, but that it was necessary three times to close the doors against crowds that were struggling to gain admission. The net cash receipts from all sources were \$18,919.41, or an average to each of the 23 charities of \$822.59.

No attempt can be made adequately to describe this festival, or to give credit to the hundreds worthy of personal mention for sacrifices made and services rendered, without danger of making distinctions that might be considered invidious. Two conspicuous exceptions, however, will probably be permitted without offense. Messrs. Farrand and Votey erected a grand organ in the rink and donated its use, thereby greatly contributing to the success of the musical feature. Messrs. Pitcher and Manda, florists, of Short Hills, New Jersey, brought to Detroit and exhibited several thousand dollars worth of orchids, making a display of these rare flowers that the judges themselves said was of very exceptional quality.

The selection of the picture of the booth erected for the House of the Good Shepherd, representing ancient Greece in architecture and dress, was not because it exceeded the others in artistic excellence, but because it seemed more adapted for the purpose of illustration. It will give, to those who did not attend the festival, some idea of the attend the festival, some acceptance and taste, as well as money exto be regretted that the photographing of the booths was not more successful, the one in the above illustration being about the only one clear enough to reproduce in an engraving by the half-tone process used in this Year Book.

One of the most interesting features of the enterprise was the hearty co-operating of Protestants, Catholics, and Jews, the English, German, and French representatives of whom worked side by side in most perfect accord, sharing equally in the net receipts from the "gate" money.

Not less than 400 ladies lent themselves to the work, with a will that took no denial, and for this reason chiefly the Floral and Musical Charity Festival Detroit society.

Foley, John Samuel, Bishop of the Slavic, and Bohemian congregations; See of Detroit, is of an old County Wex and about 350 in the State. ford family, whose progenitors in this

country settled in 1817 in Baltimore, where he was born Nov. 5. 1833. He is a brother of the late Bishop of Chica go, died Feb 19, 1879; was educated a t St. Mary's College and Theological Seminary Baltimore.



BISHOP FOLEY.

and the Apollinaris or Roman Diocesan Seminary in Rome; received tonsure and minor orders in the former city from Archbishop Kenrick, and the priesthood in the church of St. John Lateran, Rome, from Cardinal Patrizzi, Dec. 20, 1856; was made D. D. in 1857 and returned to America. His first pastoral labors were at St. B idget's, Canton, near Baltimore, and at Port Deposit and Havre de Grace. After further service at Ellicott City, he became assistant pastor of St. Peter's church, Baltimore, and built up St. Martin's church at the west end of that city, of which he took charge in 1867, and remained with it nearly until appointed to the See of He was consecrated Bishop Detroit. by Cardinal Gibbons at the Cathedral in Baltimore Nov. 4, 1888, and on the 23d was welcomed to Detroit with a street-parade and other demonstrations, perhaps never excelled on a like occasion in this country, certainly not in the Northwest.

The Catholic Church was the pioneer in Michigan, and has always been strong in the State. Its missions were planted century, and the Black-robes came to erecting their rude little church of Ste.

Foods, Adulteration of.—Under the stringent laws that have been passed in many States and countries, there is less of this than formerly. Analyses of 15,000 to 18,000 articles annually were made by the British Government during the eight years 1875-82, and the percentage of adulteration in that period was reduced from 18.1 to 16.5. By the law of Great Britain, passed in 1875 and modified in 1879, public analysts are appointed by local authorities to examine for fixed fees articles suspected of adulteration, and if so found complaint may be made to a magistrate and the offender prosecuted. The operation of this law has been beneficial. many has a similar law, and needed it, if the story current in that country be true, that of three flies which partook severally of flour, sugar, and fly-poison, the last was the only one that survived! Results are generally favorable from the few laws against adulteration that have been passed in this country, but the best are in Canada, where adulteration was reduced from 51.66% in 1876 to 25.66 in 1882. Reports from State Analysts of that date and later indicate considerable adulteration still prevailing, but not much of it injurious-the mixture of foreign substances is called rather "sophistication," and in 1885 was held to be about as follows: Spices and condiments 66%, olive oil and syrups 60, milk not inspected 50, tea 48, ground coffee 45, cream of tartar and baking powder 44, butter 40, bread only about 2, and flour none. The principal adulterant of candies and sweet foods is glucose, a preparation from corn, costing but half as much as sugar; but it is itself a healthful food, as the chemists stoutly affirm. Pure glucose syrup is sometimes used to represent honey, even imitation cells of paraffine being made to hold it. Most other adulternumerously at the north in the 17th ants are not harmful, though they weaken the article, as exhausted spices Detroit with Cadillac July 24, 1701, used to "sophisticate" condiments and spices. The common adulterations of Anne within the limits appointed for milk are water, alkalies, and various pre-Fort Pontchartrain the second day after servatives, and it is further impaired by arrival. Father Rese was the first abstracting the cream. The milk-supply Bishop of Detroit. The See of Detroit of New York City formerly contained is now separated into the Suffragan 25% of water; but it has improved in Sees of Det oit, Grand Rapids, and this and other cities under official in-Marquette. The church has 31 churches spection. The supply in Detroit is and missions in Detroit and suburbs, fairly good, much better than in many gathered in English-speaking, French, cities, and complaints are not loud of German, Belgium-Holland, Polish and other adulterations, Oleomargarine was

originally considered an adulterant of butter, but it is now commonly sold under its own name and on its own merits.

Fort-st. Congregational Church, Detroit, organized June 23, 1881, occupied a mission building erected in 1879, and

dedicated its present chapel at Fort st. west and Summit ave., | in Oct. 1888. Sittings, 350; value of church, \$8500; members, 112; Sunday services, 10:30 and 7:30:Sunday-school at 12; prayermeetings



REV. J. M. ROBINSON.

Wednesday and Friday evenings. Rev. J. M. Rob inson, late pastor, was born in Cass Co., Mich., July 31, 1847; became a licentiate in 1870, an ordained minister 1874, and pastor of this church Sept. 1, 1887, resigning his pastorate Oct. 31, 1890, to become State Evangelist in Michigan, under the American Home Missionary Society.

Fort-st. Presbyterian Church, Detroit, was organized Feb. 21, 1849, with 26 members, and in 1853 occupied its pres-

ent site with a handsome and commostrucdious ture. In 1877 it was destroyed by fire, but at once rebuilt in its present shape, confessedly one of the finest church edifi ces in the country The General Assembly of



REV. W. RADCLIFFE.

the church met here in 1872, and will again meet here in 1891. Seats, 1400; value of property, \$150,000; membership, 750. Open for benevolent or religious work nearly every day or evening; the public cordially welcomed. The Rev. Wallace Radcliffe, D. D.,

pastor, is a native of Pittsburgh and an alumnus of Washington and Jefferson College and of Princeton Theological Seminary. He was ordained in Philadelphia June, 1866, and received D. D. from Lafayette College 1878; has held pastorates in Philadelphia, Reading, Pa., and Detroit; and been Moderator of Pennsylvania and Michigan Synods, and delegate to the Pan-Presbyterian Councils in London, Eng., 1875 and He assumed his present pastorare sept., 1885, and has since received 206 members and raised for religious and benevolent work of the church \$129,359.

Gambits.-All students of chessplaying will be interested in the following full list of gambits or openings, The most famous are the Evans, King's Bishop's, and Scotch Gambits. Allgaier, 1 P to K 4, P to K 4; 2 P to KB 4, Ptakes P; 3 Kt to KB 3. P to KKt 4; 4 P to KR 4, P to Kt 5; 5 Kt to Kt 5. Center, 1 P — K 4, P K 4; 2 P — Q 4, P takes P. Center-counter, 1 P — K 4, P — Q 4; 2 P takes P. Cunningham, 1 P — K 4; P — K 4; 2 - KB 4, P takes P; 3 Kt — KB 3, B - K 2; 4 B - B 4, B - R 5 (ch).
Damiuno, 1 P - K 4, P - K 4;
Q Kt - KB 3, P - KB 3; 3 Kt takes Danish, a development of Center by 3 P — QB 3. Evans, 1 P — K 4, P — K 4; 2 Kt — KB 3, Kt — QB 3; 3 B - B 4, B - B 4; 4 P QKt 4. Greco counter, 1 P — K 4, P - K 4; 2 Kt - KB 3, P - KB 4. Kieseritzki, same as Allgaier, but in fifth move Kt is played to K 5. King's fifth move Kt is played to K 5. King's Bishop, 1 P — K 4, P — K 4; 2 P — KB 4, P takes P; 3 B — B 4. King's 1 P — K 4, P — K 4; 2 P — KB 4. Lopez, 1 P — K 4, P — K 4; 2 B — B 4, B — B 4; 3 Q — K 2, Kt — KB 3, or P — Q 3, or Q — K 2; 4 P — B 4. Muzio, 1 P — K 4, P — K 4; 2 P — KB 4, P takes P; 3 Kt — KB 3, P — KKt 4; 4 B — B 4, P — Kt 5; 5 castles, or P — Q 4 or Kt — B 3 P takes Kt or P — Q 4, or Kt — B 3, P takes Kt. Queen's, 1 P — Q 4, P — Q 4; 2 P — Q B4. Queen's pawn counter, 1 P - K 4, P - K4; 2 Kt - KB3, P - Q4. Salvio, 1 to 4, same as Muzio; 5 Kt — K 5. Scotch, 1 P — K 4, P — K 4; 2 Kt — KB 3, Kt — QB 3; 3 P — Q Steinitz, 1 P - K 4, P - K 4; 2 Kt -QB3, Kt -QB3; 3P-B4, takes P; 4 P — Q 4.

Gas. Natural.—The first use of natural gas in this country was on Washington's tract, near Charleston, W. Va., in 1841, where a "burning spring" had Other interesting facts: Nebraska is long been a curiosity. Gas was known to exist at Findlay, O., in 1836; but the first well was not sunk until December, 1885. Within 3½ years thereafter, or by June 1, 1889, 53 wells were in operation there, with a daily yield of 215,000,000 cubic feet. The gas-field in Ohio is 36 miles long and 9 miles At Findlay the gas is found in Trenton limestone, 1092 to 1312 feet below the surface. It is from this region that Detroit is supplied. Findlay has grown from 4879 population in 1885 to about 30,000 in 1890.

GENERALS.

Generals, Mortality of Union.—Gen. Thomas died at 54 years of age; Sheridan, Meade, Burnside, and Halleck, at 57; McClellan, 59; Grant and Hancock, 59; Hooker, 65; McDowell, 67; Fremont, 77. Sherman is still living, in his 71st year; and Rosecrans, also about 71.

Geography, Comparative.—One of the most interesting and informing methods of studying geography, in the schools or privately, is by comparison. In the matter of comparative area, for example, the United States with Alaska cover one fifteenth of the land-surface of the world, and one fifty-fifth of its entire surface. Texas is as large as France, Holland, and Belgium united. California is about five times as large as Ireland, and would almost contain the whole of New England, with New York, Pennsylvania, and Delaware. Its five southern counties are together nearly as large as Ohio and Connecti-The entire population of the United States might be placed in North and South Dakota, with an acre and a half of land to each man, woman, and child. Michigan is little larger than Wisconsin, Illinois, Iowa, Arkansas, or Florida, but would contain Mississippi or Louisiana approximately 11 times, Ohio, Kentucky, Virginia, or Tennessee 11 times, Indiana 12, South Carolina 13, Maine or West Washington twice, New Hampshire, Vermont, or Maryland 7 times, Massachusetts 7, New Jersey 72, Connecticut 12, Delaware 30, Rhode Island 53, Roumania 11, Scotland or Hayti 2, Bulgaria or Greece 21. Servia or Costa Rica 3, Switzerland, 33, Denmark 4, Belgium 5, the Sandwich Islands 9, Saxony 10, Montenegro 16; times. By the admission of six new States, Michigan passes from the eleventh to the seventeenth

more than twice the size of Indiana; Texas is four times as large as the New England States; Dakota is larger than England, Ireland, and Scotland together; the population of London is equal to that of all Canada, or that of New York State, including its cities; Kentucky and Portugal are about the same size; Cuba and Tennessee are equal in area; Brazil is nearly as large as the United States, but the population of the latter is six times that of the former; the populations of Canada, New York State, Ireland, and Belgium are about the same; if all the people of Canada and of the United States were placed in the State of Texas, the number of persons to the square mile would be fewer than at present in China; the population of Canada is double that of Australia; Colorado is as large as New York, Pennsylvania, and New Jersey together; it would take ten States as large as Massachusetts to make one as large as Kansas; there are more people in the cities of New York and Brooklyn than in the State of Massachusetts, including its cities; there are as many people in Chicago as in Connecticut; there are 27 States and Territories each larger than New York; Oregon is equal in area to New York and Pennsylvania; Massachusetts is smaller than New Hampshire or Vermont; Minnesota is twice the size of Ohio; the three States bordering on the Pacific are larger than the thirteen States bordering on the Atlantic; Montana is thirty times larger than Connecticut; the Dakotas are four times as large as Indiana; Iowa is five times as large as Belgium, and four times as large as Denmark; Maryland and Switzerland are about the same size; Canada is almost as large as the United States, including Alaska.

Geography, Stanley's Latest Discoveries.—They consist mainly in his find of one of the most remote sources of the Nile, and laying down the water parting of the Nile and the Congo. He also traversed a broad stretch of practically new country, and added much information about its physical features and inhabitants. The Ruwenzori or Ruwenjura mountains he now identifies with the "Mountains of the Moon" of the old geographies.

German Church of the Evangelical of States in relative largeness of area. Association, Dubois and Catherine sts.,

Detroit, has a brick edifice and parson-

age, built in 1883, and worth \$7.-500,the former seating 200, with a chapel of 50 seats. Membership, 108. Services: Sunday preaching at 10:30 and 7:30, Sunday. school at 9:30; prayermeetings



REV. A. HALMHUBER.

Tuesday and Wednesday at 7:30, Bible-class Friday at 7:30; children's catechetical class 2 to 4 on Saturday. Free seats. Rev. A. Halmhuber, pastor, was bo n April 5, 1850, at Stuttgart, Germany, entered the ministry July, 1871, at Strasburg, was pastor in Germany and Switzerland till '76, missionary at Osaka, Japan, '76-82, came to Michigan in May, '85, and to his Detroit pastorate April, 1889. Resides at 305 Dubois st.; usually at home forenoons.

Gifts permissible in good society were formerly limited to books, flowers, candy, fruits, and articles of trifling Now every thing is countenvalue. anced but wearing apparel. Towering palms, little beds or mosses and ferns in beautiful baskets, come from the All manner of jewels, silver, crystal, and porcelain goods are sent to the mother or guardian of the lady admired; and twelve-inch paper knives, sofa pillows and blankets, cabinets filled with stationery, umbrellas, handmirrors, opera glasses, lorgnettes, and traveling flasks are among the oddities with which beauty is favored.

Girls, Age of Protection for:-In Delaware, 7 years (!); Alabama, California, Colorado, Florida, Georgia, Iowa, Maryland, Minnesota, Mississippi, Montana, New Jersey, North Carolina, South Carolina, Texas, Utah, and New Mexico, 10; Virginia, West Virginia, Missouri, Kentucky, Indiana and Idaho, 12; Maine and New Hampshire, 13; Illinois, Michigan, Oregon, Wisconsin, Vermont, Ohio, Connecticut, Massa chusetts, Arizona, North Dakota, South Dakota, and Wyoming, 14; Nebraska, 15; Washington and District of Columbia, 16; Kansas, 18; Rhode Island, Arkansas, and Louisiana, no age fixed.

Girls' Toilet Articles.—According to The Family Doctor, a sensible girl will not keep a lot of cosmetics and drugs on her toilet-table, but there are a few articles she should always have in a convenient place. She should have an array of glass-stoppered bottles containing alcohol, alum, camphor, borax, ammonia, and glycerine or vaseline. A little camphor and water may be used as a wash for the mouth and throat, if the breath is not sweet. Powdered alum applied to a fever-sore will prevent it becoming very unsightly and noticeable. Insect-stings or eruptions on the skin are removed by alcohol. A few grains of alum in tepid water will relieve people whose hands perspire very freely, rendering them unpleasantly moist. We should recommend care in the use of scented soap; in many cases the perfume is simply a disguise for poor quality. A good glycerineor honey soap is always preferable. course one may rely on scented soap from a high-class manufacturer, but it costs more than it is worth. In addition to the soap for bathing, white castile should be kept for washing the hair. Occasionally a little borax or ammonia may be used for this purpose, but it is usually too harsh in its effects.

Glaciers in the United States.—An unexpected number have been discov-Mount Tacoma, or Rainier, near Puget Sound, is reported to carry eighteen upon its sides, one of them ten by (in places) four miles in size. Mt. Baker, farther north, has a smaller system. Mt. Hood, Oregon, also in the Cascade Range, has three ice-streams; and several mountains of the Coast Range have numbers of them. Shasta in Northern California has several fine ones; and there are 16, mostly small, in the Sierras east of the Yosemite Valley. There are a few little ones in the Rocky Mountains among the Wind River summits in Wyoming and the Flathead River sources in Montana; but the high Rockies are mostly devoid of them, from the dryness of their atmosphere. Of course, Alaska has glaciers galore, and of most magnificent dimensions. A scientific expedition returning thence last October, reported the great Piedmont glacier, about the base of Mt. St. Elias, as covering an estimated area of 1000 square miles.

Go'd.—The relative value of gold to silver, in many ages of history, has been about as follows: In the time of

Abraham, 1 to 8: 1000 B. C., 1 to 12; 500 в. с., 1 to 13; 1 л. д., 1 to 9; 500, 1 to 18; 1100, 1 to 8; 1400, 1 to 12; 1545, 1 to 6; 1551, 1 to 2; 1600, 1 to 10; 1627. 1 to 13; 1700, 1 to 15½; 1876, 1 to 20; 1886, 1 to 281, the highest point yet reached. The great gold nuggets of Australia are the "Welcome Stranger," 190 lbs., wor h nearly \$50,000; the "We'come," 185 lbs., \$44,000; and the nugget of 1853, 1620 oz., \$32,000. These and many smaller ones may be seen in models at the Melbourne Public Library.

Grand Army of the Republic.—This order will be especially prominent in Michigan this year, from the holding in

Detroit, during the first week in August, of the National Encampment, which will be 🌌 attended by many thousands of members and visitors, including many famous exsoldiers. The first Post of the Grand Army was



GEN'L W. G. VEAZLY.

founded with 12 members, April 6, 1866, in Decatur, Ill., at the instance of Maj. Stephenson, ex-Surgeon 14th 111. Infantry. The first State Department was formed at Springfield, Ill., July 12. 1866, and Gen. John M. Palmer elected Department Commander. The first National Encampment was held at Indianapolis in November of the same year, when 11 States were represented, and Gen. S. A. Hurlburt of Illinois was elected Commander - in - chief. Judge Veazev of Vermont was chosen Commander-in-chief at the Boston Encamp-ment last year. The Detroit meeting of 1891 will be the 25th or quartercentennial Encampment, and very ample preparations are already being made for it. Probably not less than \$125,000 will be expended upon it. A General Committee of 150, representing mainly Detroit, but also other portions of the State, has been appointed, and the following officers chosen: General Chairman, R. A. Alger; General Secretary, Geo. H. Barbour; General Treasurer, M. W. O'Brien,-all of Detroit. An

and sub-committees on finance, accommodations, transportation, bureau of information, parade, reunions, entertainment, decorations, reception, printing, press, badges, grand stands, invitations and legislation. A grand excursion will probably be given the visiting delegates, to Mackinac and the Upper Peninsula.

Great Britain - The area of the United Kingdom is 120,832 square miles; of British colonies and dependencies, nearly 9,600,000; total, about 9,-700,000. Populations estimated in 1888, 37,453,574 and over 275,500,000, or an aggregate of 313,000,000. The Irish population has been decreasing since 1881 about 0.9 per cent a year, while the rest of the islands have been increasing in a little higher ratio.

Greatest Things .- The Bank of England is the most extensive banking institution in the world. It employs over 1000 clerks, and its building covers eight acres.

La Scala, Milan, is the finest theatre on the globe. Its stage is 150 feet wide, and there are six tiers of boxes.

"Paradise," by Tintoretti, is the largest painting. It is 84 feet wide and 32½ feet high, and is in the Doge's Palace at Venice.

The largest chain ever fabricated is in the Imperial Arsenal at Vienna, with 8000 links. It was thrown across the Danube in 1529 by the Turks.

emerald discovered largest weighs 2980 carats, and is in the Schalthoem or Imperial Jewel-office at Vienna.

The largest collection of coins, 125,-000, is in the cabinet of antiquities at Vienna; 50,000 are Greek and Roman.

The largest cannon is at Ghent, Belgium. The diameter of the bore is 23 feet.

The largest organ is in the church of St. Bayon, Haarlem, Holland. It fills up the whole of one end of the vast edifice and reaches to the roof; has 5000 pipes, some of them 15 inches in diameter, and 60 stops.

The most celebrated whirlpool is the Maelstrom, southwest of the Lofoden Isles, off the coast of Norway. produced by the meeting of two opposing currents, and is a mile and a half in diameter.

The largest steam ferry boat in the world is said to be the "Robert Garrett," between New York and Brook-Executive Committee will be appointed, | lyn, carrying 5000 passengers at once.

The largest saw-mill is at Clinton, lowa, with seven band- and three gangsaws, and two batteries of ten boilers each. It cost \$200,000, and can saw 450,000 feet of lumber in eight hours, or nearly 60,000 feet an hour.

The largest steam derrick is in use at the docks in Hamburg, Germany, to load and unload vessels. It can handle a ten-wheeled locomotive and other immense weights with perfect ease.

The largest and heaviest buildingstone yet quarried in England was got out from the Plankington quarry, Norwich, February, 1889, in one piece, without crack or flaw. It is 15 by 6 by 5 feet in size, and weighs over 35 tons.

Marshall Pass, on the Denver & Rio Grande R. R., 10,851 feet above the sea, as the highest point crossed by a railway in the United States, has been superseded by another pass in the high Rockies.

Half-tone Engraving.—This comparatively new process of making plates for printing direct from photograph negatives, has been employed for the illustrations for this Year-book. As they are made direct from negatives, they are more delicate and true to nature than can possibly be secured by hand cut work, even of steel engraving. Nearly all of the engravings of public buildings in the front of this book were from photographs taken by a photographer sent out by the Detroit JOURNAL.

Hamtramck Presbyterian Church, east end of Detroit, org. Oct. 25, 1883, occupies a frame building seating 250, and

has a property of \$7000; of \$7000; membership, 150. Sunday preaching ser vices at 10:30 and 7:30; S. S. 11:30; young people's pray er-meeting 6:30; weekly prayer-meei ing Wednes day evening Ladies' Aic and Home Missionary



Societies 2:30 REV. HENRY S. JENKINSON. P. M. Thursday; Foreign Missionary So-

ciety first Thurs. in month, 2:30 P. M. All seats free. Rev. Henry S. Jenkinson, pastor born 1856, Cheltenham, the nerves will be found to have re-

Gloucester, Eng., was ordained June 18, '82, and came to this church March 8, '86. Residence, 120 Field ave.: re-Residence, 120 Field ave.; receives Thursday and Friday afternoons.

Hailoo and Hurrah.—These commonplace words have singular origins attributed to them. It is said that the people of Charnwood Forest, Leicestershire, Eng., when they desire to hail a person at a distance, call out not "halloo!" but "halloup!" and this is imagined to be a survival of the times when one cried to another, "A loup! a loup!" or as we would now say, "Wolf! wolf!" "Hurrah!" again is believed to be derived from the Slavonic huraj, "to Paradise," which signifies that all soldiers who fell fighting valiantly went straight to heaven. "Prithee" is obviously a corruption of "I pray thee"; while "marry" was originally a method of swearing by the Virgin Mary.

Haven M. E. Church, Bagg and Sixteenth sts., Detroit, was organized 1872. Value of property, \$18,000; member-

ship over 300; Sabbathschool, over 500; Epworth League, 125; Junior League, 115. Rev. G. L. Hanawalt, pastor, born in Licking 🛭 Co., O., 1838, was educated at Otterbein U n i v ersity, entered North Ohio Confer-



REV. G. L. HANAWALT.

ence 1870. was transferred to Detroit Conference 1889, and appointed to this charge. Residence, 507 Sixteenth st.

Hats — The plug- or stovepipe-hat was known at least as far back as the time of Albert Durer (1471-1528), who made a nobleman's crest of it among the marginal illustrations of a prayerbook.

Hiccoughs.—To cure them, sit erect and inflate the lungs fully; then, retaining the breath, bend forward slowly until the chest meets the knees, and after gradually rising again to an erect position, slowly exhale your breath. Repeat this process a second time, and

ceived an excess of energy that enables | many artificial encouragements were them to perform their natural functions.

Hills to the Acre:—At 4½ feet apart, 2722: 4½, 2151; 5. 1722; 5½, 1440; 6, 1210; 6½, 1021; 7, 889; 8, 680; 8½, 602; 9, 538; 9½, 482; 10, 435; 10½, 394; 12, 302; 13, 258; 14, 225; 15, 198; 16, 170; 17,151; 18, 134; 20, 108; 25, 69; 30, 48; 35, 35, 40, 27,

Holidays.—The new Republic of Brazil has instituted an extraordinary system of holidays: Jan. 1, to celebrate universal brotherhood; April 21, the national independforerunners of ence; May 3, discovery of the country; brotherhood of Brazilians: Sept. 7, in honor of Brazilian independence; Oct. 12, discovery of America; Nov. 2, in memory of the dead, a kind of Decoration Day; Nov. 15 (anniversary of the overthrow of the Empire, 1889), the glory of Brazil in general. Other national holidays: Canada, July 1, Dominion Day, celebrating the confederation of the Provinces; France, July 14, the destruction of the Bastile, 1789; Italy, Sept. 21, entrance of the Italian Army into Rome, 1870, completing the unification of the country; Mexico, May 5, a great victory over the French invaders.

Horse-power.—A horse can drag, by comparison with what he can carry on his back, about as follows: On the worst earth road, three times more; on a good macadamized road, nine; on plank, twenty-five; on a stone trackway, thirty-three; on a good railway, fifty-four times as much. On metal rails a horse can draw one and two thirds as much as on asphalt pavement; three and one third as much as on good Belgian blocks; five times as much as on ordinary Belgian blocks; seven as on good cobble stone; thirteen as on ordinary cobble-stone; twenty as on an earth road; and forty times as much as much as on sand. The unit of horsepower, 33,000 pounds, raised one foot per minute, was established about a century ago by James Watt, who settled the figures in a curious way. Watt in his usual careful manner determined the average work which horses in his district could perform, and he found that the raising of 22,000 pounds one foot per minute was about an actual horse power. He was then engaged in the manufacture of engines, and had almost a monopoly of the trade, but Fruits are made up of water, customers were so hard to find that less of starch, gum, and sugar.

necessary to induce power-users to buy his engines. As one method, Wattoffered to sell engines reckoning 33,000 foot-pounds to the horse-power, or onethird more than the actual. And thus what was intended as a temporary expedient to promote business has been a means of giving the false unit of a very important measurement to the world.

The nominal horse-power for a boiler, according to the Government experts. is an evaporation of 30 lbs. or about half a cubic foot of water into steam at 70 lbs. steam pressure, with water fed into the boiler at 200° Fahrenheit.

The total horse-power of steam-

engines in the United States was estimated a few months ago at 12,100,000, including locomotives and steamers.

Hours of Labor.—In New England sixty years ago, mills generally ran 13 hours a day the year round, but one in Connecticut kept running 14 hours, and the Eagle Mills, at Griswold, 15. rules for mills at Paterson, N. J., required women and children to begin w rk at 4:30 A. M. Nowadays in Belgium 11 hours are the average working day, but brewers have from 10 to 17, brick-makers 16, cabinet-makers often 17, street-car drivers 15 to 17, railwayguards sometimes 191, women at heavy labor in mining districts 13 or 14. Saxony, 13, with 2 off for meals. Baden. 10 to 12, but often 15 in cotton-mills and stone-ware and china works, sawmills 17, and sugar refineries 24 hours on and 24 off. In Russian factories 6 to 20. Portugal, usually sunrise to sunset; field-hands and building trades in summer, 4:30 or 5 A. M. to 7 P. M., 2 or 3 off middle of day, in winter 7:30 to 5, with shorter nooning; in factories 12 in summer, 10 in winter, 14 off for meals. Turkey, sunrise to sunset. Montenegro, in summer day-laborers begin between 5 and 6 A. M., and work till sunset, with an hour off at 8 and from 12 till 2 o'clock; in winter 7:30 or 8 to sunset, 1 off at noon. Same rules for skilled labor, but less strictness in practice.

Household Hints.—One pound of oatmeal contains as much nourishment as six pounds of fine flour; one pound of cracked wheat as eight loaves of baked bread, and a fresh egg as 11 ounces of fresh meat and one ounce of wheaten bread, but in a more digestible form.

Fruits are made up of water, with ss of starch, gum, and sugar. They

serve often for drink instead of any it in a jar or glass can, and set it where o'her flui L an d their acids aid materially in digestion.

Boiled meat is more digestible, as well as more economical, than baked Started in a little boiling water, and then cooked very slowly until perfectly tender, it is the best. Seldom if ever fry any kind of meat, if you care for health.

Cotton-seed oil, olive oil, and other vegetable fats are used now by our best cooks for frying cakes, fish, etc., and are certainly more clean and whole-These oils some than common lard. are easier of digestion, and more readily assimilate than animal fats.

Raisins can be stoned more easily when boiling water has been poured over them. Let them stand ten min-

utes, and then drain.

Drink water that has been boiled, if there is any fear of impurity. Pure water is free from bad odors, colors, or

Dr. Johnson, of Brooklyn, makes the following suggestions as to canned fruits and meats: "Reject every can that does not show the golden line of resin around the edge of the solder of the cap, the same as seen on the seam on the side of the can. All others are sealed with muriatic acid. Reject every one that shows any rust around the cap on the inside of the head of the can. Rust proves that there was air inside, and consequently fermentation; also any can that does not bear the manufacturer's name. Before buying press the bottom of the can up, and if the contents are decomposed, the tin will rattle like the bottom of the oiler of your sewing machine. It the contents are sound the bottom will be solid and impossible to push up."

Take a new flower-pot, wash it clean, wrap in a wet cloth, and set over butter it will keep it as hard as if on ice. Milk, if put into an earthen can, or even a tin one, will keep sweet for a long time if well wrapped in a wet

cloth.

GOOD PASTE ALWAYS READY.—Dissolve half a teaspoonful of alum in a pint of hot water; when cold stir in flour enough to make it about as thick as rich cream; stir in as much powdered rosin as will lie on a cent. Put a saucepan on the stove, put a teacupful of boiling water in it, then stir in the mixture; stir it constantly to keep it from burning. When it is about as thick as much take it from the fire, put lime before being put away, it will

it will be cool. It will become hard, and when needed for use take out a little and soften it with warm water.

Pleasant rainy day work for the older children is to be found in the making of a scrap-book of the portraits of noted men and women; the portraits to be obtained from publishers' catalogues, magazines, newspapers, and other available sources.

Remove tar from the hands by rubbing with the outside of fresh orange or lemon peel, and drying immediately. The volatile oil dissolves the tar so that it can be rubbed off.

Soiled wall-paper is improved by rubbing with a clean flannel cloth

dipped in fine oatmeal.

An excellent mixture to remove spots of grease, from boys' and men's clothing particularly, can be made of four parts of alcohol to one of ammonia. Apply the liquid to the grease-spot, and then rub diligently with a sponge and clear water.

Scorches made by overheated flat-irons can be removed from linen by spreading over the cloth a paste made of the juice pressed from two onions, one-half ounce white soap, two ounces fuller's earth, and one-half pint of Mix, boil well, and cool bevinegar. fore using.

When color on a fabric has been destroyed by acid, ammonia is applied to neutralize the acid, after which an application of chloroform will in almost all cases restore the original color. application of ammonia is common, but that of chloroform is little known.

Ink-stains may be removed from books by wetting the spot with a solution of oxalic acid, 1 oz., and water onehalf pint.

Never put pickles in a jar that has

had lard in it.

When cockroaches get into smooth bowls half filled with molasses and water, they can not get out.

When an iron poker becomes soft by long usage, it can be hardened by heating to redness and plunging several times in a pail of cold water.

Never soak mackerel or other salt fish with the skin-side down; the salt will fall to the skin and remain. the flesh-side down and soak it, as salt falls to the bottom.

To protect steelware from rust: all steel or tinware is well rubbed with lard and then with common unslacked never rust. to remove rust.

Sponges which are to be used in the bath room may be softened by boiling for a few minutes in three waters. After each time of boiling rinse in cold water, and put on the stove again in a pan of cold water.

Glue delicate and nice for mounting ferns and sea-weeds is made of five parts gum arabic, three of white sugar, two of starch; add a very little water, and boil until thick and white.

"The finest calf ever raised on my father's farm was fed the entire summer on buttermilk, and in the fall sold for four times the value of ordinary calves of his age. The next time you churn give the buttermilk to the calves. but not to the farm boys. They know what it is good for."

In dealing with furniture, remember to keep water away from everything soluble therein, oil from everything porous, alcohol from varnish, and acids

from marble.

To take ink-spots out of mahogany, touch with a feather dipped in a teaspoonful of water to which a few drops of spirits of nitre have been added, and rub quickly with a wet cloth.

If oil is spilled on a carpet and you immediately scatter cornmeal over it, the oil will be absorbed by it. Oil may also be removed from carpets upon which you dare not put ether or ammonia, by laying a thick blotting paper over it, and pressing a hot flat-iron on Repeat the operation several times, using a clean paper each time.

Handy way of making glue: Break best glue into small pieces, just cover with strong vinegar or dilute acetic acid, let it soak a few hours, and heat till it boils. In cold weather it will become a jelly when cold; in summer it will remain fluid. For use, warm till fluid enough; there is no need to boil it.

Put a teaspoonful of brown sugar into a quart of paste, and it will fasten labels as securely to tin cans as to wood. House keepers may save themselves much annoyance in the loss of labels from their fruit-cans when putting up their own fruit, by remembering this.

The best rubber cement is "marine A cheaper one, highly recomglue." mended, is made by cutting a quantity of pure India-rubber in its natural state into small pieces, putting them in a wide mouthed bottle, and filling it about half full of the purest benzine, the rubber will swell almost immediate- the one, and the absence of them in the

This is also the best plan | ly, and if well shaken will in a few day assume the consistency of honey. the rubber does not dissolve, add mor benzine; if when dissolved the cemer is too thin, add more gum. A piece of rubber one inch in diameter will mak a pint of cement. This dries in a fer minutes and is very useful in unitin pieces of leather, as it is both elasti and durable.

> To mark tools: Coat them over wit a thin layer of wax or hard tallow, b first warming the steel and rubbing o the wax until it flows, and let it coo When hard mark the name through th wax with a graver or any sharp-pointe instrument, and apply nitric acid. Al ter a few moments wash off the aci and wipe it with a soft rag, when th letters will be etched into the steel.

> Plant-lice of all kinds and many other insects can be destroyed by the kerosen emulsion, or mixture of kerosene an It can be prepared by taking sof soap one quart, or hard brown soap, o what is still better whale-oil soap, one fourth pound, two quarts hot water and one pint kerosene. Stir till all an permanently mixed. Then to one par of this mixture add fifteen parts of A force-pump is the best in strument to apply it with, as a power ful stream sends it into cracks and seams not otherwise reached.

> To cure a felon: Take salt and pulverize it fine as flour, wet it with spirit of turpentine sufficient to make a paste, apply this to the part affected, then take a strip of common muslin, beginat the end of the finger, and wrap it tight enough to force the blood out of the finger affected. Then keep it well saturated with spirits of turpentine for six hours, take off the bandage, and your felon is cured. "I have nevel known a failure where the above remedy was applied before suppuration had commenced, and even after that stage, if the patient has nerve enough to endure the operation, it will arrest the disease."

> To test silk: Take ten fibers of the filling in any silk, and if on breaking they show a feathery, dry, and lack luster condition, discoloring the finger in handling, you may at once be sured the presence of dye and artificial weight Or take a small portion of the ing. fibers between the thumb and forefinger and very gently roll them over and over, and you will soon detect the gum mineral, soap, and other ingredients of

mother. A simple but effective test of inpurity is to burn a small quantity of the fibers. Pure silk will instantly excrisp, leaving only a pure charcoal; cheavily dyed silk will smoulder, leaving a yellow, greasy ash. If on the contrary you can not break the tenstrands, and they are of a natural luster and brilliancy, and fail to discolor the fingers at the point of contact, you may be well assured that you have a pure silk, honest in its make and durable in its wear.

Hymns, the Twelve Best.—According to good judges, the dozen best hymns in the English language are Lyte's evening hymn, "Abide with me," Heber's "From Greenland's icy mountains," Gilmore's "He leadeth me," Keith's "How firm a foundation," Miss Elliot's "Just as I am," Newman's "Lead, kindly light," Stennett's "Majestic sweetness sits enthroned," Smith's "My country, 'tis of thee," Palmer's "My faith looks up to thee," Toplady's "Rock of Ages," and Watts's "When I survey the wondrous cross."

Hypnotism.—In order to produce hypnotic sleep, the fixing of the eves upon a brass ball or other bright object, according to Braid's method, is no longer considered necessary. Simply place the patient in an arm chair, in a quiet, slightly darkened room; him not to resist the influence of sleep, and then repeat a dozen or more times some such phrases as "Now you are going to sleep; you are breathing slowly; your eyes are closing; you are almost asleep," etc., in a low, monotonous tone of voice. If the patient is hypnotized, a cataleptic state will be manifested when the arms are raised. Now the desired cure is suggested, and after a few moments the patient is awakened by simply telling him to awake.

Idaho was admitted the 43d State in the American Union July 3, 1890. It has 85,290 square miles and 84,229 population. In 1880 it had 32,610 people, and an improved acreage of 197,407. Its capital remains at Boise City.

tistics the three Slavic States. Roumania, Servia, and Russia, head the list of illiterates with about 80 per cent of their population unable to read and write. Of Latin races Spain leads with 63 per cent, followed by Italy with 48, and France and Belgium about 15. Illiterates in Hungary are under 43 per lock Foote, Margaret J. Preston, Miss

cent, Austria 39, Ireland 21, England 13, Holland 10, United States (white population) 8, Scotland 7. Teutonic races are the best favored in this regard, Switzerland having but 2½ per cent, and Germany as an empire 1, while in Sweden, Denmurk, Bavaria, Baden, and Wurtemberg practically no one can not read and write.

"Immortals," the Forty American.— In 1884 The Citic, a New York literary journal, took a vote of its intelligent and large body of readers, which resulted in the choice of forty eminent scholars and writers, held worthy to constitute "a possible American Academy, formed on the same general principle as the famous French literary institution." The list is now as follows: O. W. Holmes, J. R. Lowell, J. G. Whittier, Geo. Bancroft, W. D. Howells, G. W. Curtis, T. B. Aldrich, F. Bret Harte, E. C. Stedman, E. E. Hale, G. W. Cable. Henry James, S. L. Clemens ("Mark Twain"), C. D. Warner, R. H. Stoddard, W. D. Whitney, Walt Whitman, Noah Porter, John Fiske, Julian Hawthorne, John Burroughs, T. W. Higginson, O. B. Frothingham, Geo. P. Fisher, M. C. Tyler, C. A. Dann, D. G. Mitchell ("Ik Marvel"), A. Winchell, G. P. Lathrop, W. W. Story, F. Parkman, R. W. Gilder, Phillips Brooks, C. E. Norton, F. J. Child, F. P. Steckton H. G. Lova, D. Wijste. R. Stockton, H. C. Lea, A. D. White, H. H. Furness, Joel C. Harris ("Uncle Remus"). The last nine take the place of R. G. White, H. W. Beecher, Jas. F. Clarke, Asa Gray, T. D. Woolsey, A. Bronson Alcott, Mar't Hopkins, John G. Saxe, and E. P. Whipple, deceased.

Immortelles, the Twenty American.-Another and very recent vote by the readers of The Critic designates the following as the twenty Immortelles, or foremost living women in American literature. They are named in the order of largest votes: Mrs. Stowe, Mrs. Burnett, Miss Murfree, Mrs. Howe, Mrs. Ward (Elizabeth Stuart Phelps), Miss Jewett, Mary Mapes Dodge, Miss Woolson, Edith M. Thomas, Margaret Deland, Adeline D. T. Whitney, Celia Thaxter, Amelia E. Barr, Lucy Larcom, Mrs. Cooke (Rose Terry), Miss Dodge ("Gail Hamilton"), Mrs. Spofford (Harriet Prescott), Louise Chandler Moulton, Mary E. Wilkins, Mrs. Teufel (Blanche Willis Howard). The twenty next in favor are Mary Hal-

Woolsey ("Susan Coolidge"), Louise of the day. Imogene Guiney, Margaret E. Sangster, Martha J. Lamb, Rebecca Harding Davis, Miss French ("Octave Thanet"), Mrs. Terhune ("Marion Harland") Miss Willard, Harriet W. Preston, Mrs. M. A. Livermore, Agnes E. Rep-plier, M. G. Van Rensselaer, Kate Field, Frances Fisher ("Christian Reid"), Helen Gray Cone, S. M. B. Piatt, Mrs. Custer, Elizabeth B. Stoddard.

Indian Territory.—The last report of the Indian Agent here gives the Chero kee population as 25,000, Creeks 15,000, Chickasaws 6400, Choctaws 13,000, Seminoles 2600--about 62,000 in all. About 19,000 are full-blood, 33,000 mixed, and 15,000 intermarried with whites and negroes. They occupy about 20.000,000 acres, or 30,1021 square miles.

Insanity, Alcoholic.—A specially interesting feature of the last annual report of the Eastern Asylum for the Insane, at Pontiac, Mich., relates to cases of insanity induced by alcoholic excess, which seem to be numerous there. The Medical Director, Dr. Burr, classifies delusions arising from it as follow: Of suspicion, apprehension, persecution, conspiracy, poison, 200 cases; sexual, 5; of unseen agency, electricity, mesmerism, etc., 26; religious, 29; of extravagance, 53; of personal identity, 3; of others' identity, 53; visceral illusions, 11; imperative conceptions, 3; suicidal attempts 24, threats 26; homicidal attempts 15, threats 35, murder 1; hallucinations of hearing 65, seeing 25, smell 3. The Director adds: "Contrary to the experience of German writers, it would from this tabulation appear hallucinations of hearing are far in excess of those of the other special senses, more than double the number suffering from these hallucinations, than from those of sight. It is probable that in many of these cases hallucinations were originally the basis of the subsequent delusions."

Insects.—A piece of gum camphor as large as a hazel-nut for an ordinary room, if burnt in it with doors and windows closed, will effectually kill every insect. Put the camphor in an iron kettle, and this into another iron kettle, as it burns very fiercely. Let the smoke remain in the room for about half an hour; then open the windows

A clear, windy day should be chosen.

Interest.—A short way of calculating interest is to multiply the principal by as many hundredths as there are days, and divide by 90 for 4%, by 72 for 5%, 60 for 6, 52 for 7, 45 for 8, 40 for 9, 36 for 10, and 30 for 12.

Internal Revenue Taxes.—See Appendix.

Inventions.—In a multitude of remarkable tokens of mechanical progress during about the last half-century, the following are the more important: Ocean steamships, railways, street tramways, telegraph lines, ocean cables, telephone, phonograph, photography and a score of new methods of picturemaking, aniline colors, kerosene oil, electric lights, steam fire-engines, chemical fire-extinguishers, anæsthetics and painless surgery, gun-cotton, nitroglycerine, dynamite, and a host of other explosives; aluminium, magnesium, and other new metals; electroplating, spectrum analysis, and the spectroscope; audiphone, pneumatic tubes, electric motors, electric railways. electric bells, type-writers, cheap postal system, steam heating, hydraulic elevators, vestibule cars, cantilever bridges.

Japan has now an estimated population of 40,000,000.

Jews in New York City number 90,-000, and have 49 synagogues. form an influential element, many of them being bankers, merchants, editors, and politicians. Although comprising 10 per cent of the population, they contribute less than 1 per cent to the criminal classes.

Justices' Robes.—The robe of the Chief Justice of the United States Supreme Court is black Chinese satin: the other justices wear black silk, all made alike. One woman has made these robes for forty years, and gets \$100 apiece.

(otherwise spelt kermis, Kermess kirmess, and kirmes), is the recent importation of a popular Flemish entertainment, and is now the fashionable method of a charity festival in this country. The word originally meant churchmass in several European languages, and was appropriated first to the feast of dedication of a church, then to an annual fair or market, and finally, in the Low Countries and French Flanders, wide, and let them remain so the rest to a yearly town festival, often held on

the feast-day of the patron-saint of the place or of its principal church, and characterized by many rude sports, which at one period degenerated into licentious extravagances. [See also "Pardon."]

King's Daughters.—This society was formed in New York City in January, 1886, at first on the Rev. E. E. Hale's plan of tens; but local clubs now consist of any desired number of members. Its object is to promote association of women in small bands for devotional and charitable purposes. Members wear a small silver Maltese cross, marked "I. H. N." (initials of the society's motto, "In His Name"), and the date 1886. It has a remarkable growth Headquarters, No. 47 and success. West Twenty-second st., New York A similar society of King's Sons has been organized.

Labor Day was first officially pro-claimed by Gov. Humphrey, of Kansas, for Sept. 1, 1890, which thus be came a legal holiday in that State.

Lamp-chimney.—One in Americus, Ga., has been used daily for eight years, having been boiled in salt and water when bought, and no amount of flame has since sufficed to break it.

Leap-year, why 1900 will not be a.-The year is 365 days, 5 hours, 49 minutes long; 11 minutes are taken every year to make the year 3651 days long, and every fourth year we have an extra This was Julius Cæsar's arrangeday. ment. Where do these eleven minutes come from? They come from the future, and are paid by omitting a leapyear every 100 years. But if a leapyear is omitted regularly every hundredth year, in the course of four hundred years it is found that the eleven minutes taken each year will not only have been paid back, but that a whole day will have been taken up. So Pope Gregory XIII., who improved Cæsar's calendar in 1582, decreed that every centurial year divisible by four should be a leap-year after all. So we borrow eleven minutes each year more than paying our borrowings back by omitting three years in three centurial years, and square matters by having a leapvear in the fourth centurial year. Pope Gregory's arrangement is so exact, and the borrowing and paying back balance so nicely, that we borrow more than we pay back to the extent of only one day in 3866 years.

Liability. — The responsibility physicians in the treatment of patients has been fixed by the courts as follows: A physician treating a patient in good faith, to the best of his ability, is not criminally responsible for the patient's death, although caused by medicine administered by him, but a person ignorant of the uses and properties of a poisonous drug is criminally liable for the negligent use thereof. In the case of a dentist or surgeon using an anæsthetic, it is held that he is not bound to look for any but the probable and natural effects of the drug, and is not liable for results arising from the peculiar temperament or condition of the patient, of which he had no knowledge; although if this were discoverable upon such an examination of the patient as reasonable skill and diligence require, the dentist or surgeon would be responsible for negligently failing to inform himself.

Lincoln-ave. M. E. Church, Lincoln and Putnam aves., Detroit, org. 1885, built an \$1800 chapel with 200 sittings,

added p the main building summer of 1888, the whole having a capacity of 500, worth and about \$12,-000. It has had healthy growth from the first, and now numbers 233 full members and ten pro-



REV. L. P. DAVIS.

bationers. Sunday services, class at 10, preaching 10:30 and 7:30, S. S. at noon, Epworth League devotional meeting 6:30; general prayer-meeting Wednesday eve. Public always invited. Rev. L. P. Davis, D. D., b. Dec. 31, 1839, in Ray township, Macomb Co., Mich., was graduated from the Northwestern University with class of '73, entered ministry and joined Detroit Conference Sept., '73, and took Lincoln-av. pastorate Sept., '87. He was made D. D. May, 1890. Residence, 291 W. Hancock ave.; telephone 4405-3R.; receives Friday afternoons.

Life, Expectation of .- After the first year of human life, chances of living increase slowly to the fourth year, then, slowly decline. Farm-laborers have an average expectation of 45.32 years of life; Carpenters, 45 28; Domestics, 42.03; Bakers, 41.92; Shoemakers, 40.87; Weavers, 41.92; Tailors, 39.40; Hatters, 38 91; Stone-masons, 38.19; Plumbers, 38.18; Mill-operatives, 38.09; Black-Bricklayers, 37.96; smiths, Printers, 36 66; Clerks, 34.99; average of population, 39.88. A remarkable case of longevity was brought to general notice by the death, Sept. 13, 1890. of Bridget Doty, of Mineral Point, Wis. She is known to have been born in Ireland in 1770, and hence was 120 years old.

Lightning, Annual Deaths from.—In England, something less than 1 in 1, 000,000 of population; France, not quite 2; Prussia, nearly 4; Russia and Switzerland, over 5. Of those thus killed in England 81 per cent are males, only 19 per cent are women.

Locomotives cost about \$12,000 each in England, in this country \$7000 to \$8000. But the English engine is not considered one-half better than the American.

Losses in Battle.—In eight battles to Waterloo, Prussia lost in killed and wounded 18.42 per cent of all engaged, and 3.86 at the battle of Koniggratz. Austria in seven to Waterloo lost 11.17, and 8.56 in two afterwards; France 22.38 in nine to Waterloo, and 8.86 in nine subsequently; England in four battles, 10.36. In the war of the Rebellion, eleven battles, the Federals lost 12.89, and the Confederates 14.16. Thus, excepting only the troops of Frederick and Napoleon, the American soldier proves capable of sustaining the heaviest loss on battle-fields; and the excess of German and French loss is believed to be due rather to the persistent tactics of their great leaders than to the discipline of the troops. In the entire Rebellion the Union loss was 4.7 per cent and Confederate 9, against and evening, Wednesday evening, all 3.2 by the Allies in the Crimean war, holy days, and every day in Lent. While 3.1 by the Germans in the Franco-Prussian war, and 2.6 by Austria in the room is open afternoons, and daily war of 1866. The Fifth New Hamp-shire Infantry relatively leads the Union | Membership, 75; value of property, losses with 295 killed or mortally \$50,000. The Rev. Paul Ziegler, Rec-wounded; the 83d Pennsylvania is next, tor, was born in Detroit Dec., 1847, or-with 282; and the 7th Wisconsin third, dained 1874, and took charge of this lost 423 in ten months; the 8th New except forenoons of school-days.

York H. A. 331 in about the same time. From the 11th Ohio Battery 69 men were killed at Iuka. At Gettysburg the First Minnesota Infantry lost 229, or over 28 per cent, the highest percentage of the war, though of killed, wounded, and missing a percentage of 42 was reached by Hancock's Division at Fredericksburg. At Gettysburg the officers lost 27 per cent in killed and wounded, enlisted men 21; at Shiloh 21 and 17. In general 1 officer was killed for every 16 men; 1 to 72 died of disease, and of colored troops 1 to 215.

Marble.—Extensive quarries of verde antique marble, said to surpass in brightness and variety of color the famous Italian, Greek, and Russian marbles, have been found near the Felch Mountains, in the Upper Peninsula. Its foundation color is green, as the name indicates, but variegated with many other colors beautifully inter-There is no finer material blended. anywhere for columns, pilasters, pedestals, wainscots, mouldings, mantels, and other details of house decoration.

Mariners' Church, Woodward ave. and Woodbridge st., Detroit, is the oldest stone building in the city, built

1849, on site r of homestead of Mrs. Col. Anderson and Miss Taylor. who left their entire estate to found ล free people's church, but especially for sailors. Rent: from part of building help support the church and swell the fund



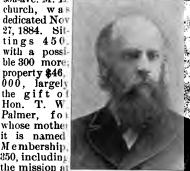
REV. PAUL ZIEGLER.

for added buildings proposed on Griswold st.; sittings, 400. Services Sunday morning navigation is closed a penny readingwith 281. Forty-five regiments out of church 1885, and serves also as Princi-2000 lost over 200. In the larger formapal of Detroit Church Academy. Restions the First Maine Heavy Artillery idence, 103 W. High st.; may be seen

Mars.—Careful observations of this | Soothing Syrup has enough alcohol to planet, and the discovery of an apparent elaborate system of artificial canals, lead to the reasonably certain con clusion that this planet is inhabited. See Appleton's Annual Cyclopædia for 1888, page 513.

Mary W. Palmer Memorial M. E. Church, McDougall ave. and Champlain sts., Detroit, successor of Jeffer-

son-ave. M. E. church, was dedicated Nov 27, 1884. Sittings 450. with a possible 300 more; property \$46, 000, largely the gift of Hon. T. W Palmer, for whose mother it is named Membership. 350, including



REV. W. H. SHIER.

Baldwin ave. and Champlain; Sunday-schools, 500. Sunday services 10:30 and 7:30; prayer service, 7:30 Wednesday; Epworth League, Friday 7:30. Seats free; expenses met by voluntary contributions. Rev. W. H. Shier, minister in charge, was born in Paterson, N. J., June 25, 1832, entered the ministry Oct. 1, 1861, has had most of the first-class charges of the Detroit Conference, and came to this church Sept., 1889. Resides at parsonage, study in church; receives the general public 8 to 12 Tuesdays.

Medicines, Alcoholic.—According to official reports based upon scientific inalyses by the Analyst of the Massachusets State Board of Health and the Assayer of Rhode Island, the percentiges of alcohol in some popular mediines are as follow: Walker's Vinegar Bitters, much vaunted as a temperance emedy, 6 per cent; Wheat Bitters, 13; Reed & Carnrick's liquid peptonoids, 5; Meusman's Peptonized Beef Tonic, 6; California Wine, 18; Brown's Iron Bitters, 19; Leibig Co.'s Coca Beef Conic, 23; Hoofland German Bitters and Burdock's Blood Bitters, 25; Colton's Nervine, 27; Drake's Plantation Bitters, 0; Warner's Safe Tonic, 35; Mishler's Ierb Bitters, 36; Hostetter's Bitters, 43; aregoric, about 50; Jamaica Ginger, Murdock's Liquid Food is about 0.

produce a flame if heated in a retort. Some remedies for children contain opium at well as alcohol.

Memorial Presbyterian Church, Campau Park, Detroit, was organized Jan. 11, 1881. Its chapel, however, was dedicated Dec.,

1880; sermon by the late Rev. Dr. Wm Hogarth; and the main structure was conse c r at e d Dec. 17, 1882. Sittings, 500. chapel as many, class-room includ Total ed. property. with church equipment, **\$**40,000.



REV. D. M. COOPER.

Three persons (Leonard Laurense \$6000, Mrs. A. L. Sprague \$1000, Mrs. V. K. Moore \$1000) gave \$8,000, and the pastor, Rev. Mr. Cooper, \$25,600, besides considerable sums since, and he also plans the gift of a parsonage. Membership, 275; average attendance Sunday school, 400. Sunday services 10:30 and 7:30; Sunday school, 2:30; regular prayer-meeting Wednesday evening; young people's Friday evening. Rev. D. M. Cooper is a native of Detroit, born April 18, 1827, graduated at Michigan University 1849, and studied also at Princeton Theol. Sem., entered the ministry 1851, was pastor at Saginaw, Grand Haven, and Albion, began in Detroit in 1879 with Clinton-avenue mission, out of which grew Memorial church. He was installed its pastor Nov. 21, 1883. idence, 501 Jefferson ave.

Memories, Great.—It is said that Pascal never forgot anything he had seen, heard, or thought, Avicenna repeated by rote the entire Koran when he was ten years old, Francis Suarez had the whole of St. Augustine's works in his memory—enough, one would think, to destroy all his mental power digestion; Julius Lipsius once of offered to repeat the entire history of Tacitus without a mistake, on forfeit of his life. In our own day Jedediah Buxton and Zerah Colburn had a prodigious power and rapidity of calculating ne third whisky; Mrs. Winslow's in their minds. Co.burn could tell the

number of seconds in 58 years almost | vested before the question could be repeated. Buxton was once taken to the theatre to see Garrick, and was observed to pay unremitted attention to the great actor. When he went out a friend asked him how he had been impressed by the acting, and Jedediah answered by giving the number of words and syllables Garrick had spoken. His mind had been interested solely in this enumeration. Scaliger committed the whole of the Iliad and Odyssey in three weeks.

Michigan, by the deficient census of 1890, has a population of 2,089,792, having in the decade since the Tenth Census advanced 452,855, or 27.66 per cent. It has passed Kentucky in the race, but has itself been passed by Texas; so that it retains its former place as eleventh of the States in order of size. By the last report of the Superintendent of Public Instruction, the State had 403,604 children in the schools, and a teaching force of 15,074 teachers, to whom \$3,190,574.85 were paid. The mineral product of Michigan for 1889 was: Iron ore, 5,829,828 long tons; pig iron, 198,745 tons; copper, 43,613 tons; land plaster, 19,823 tons; stucco, 206,380 bbls.; salt, 5,950,-000 bbls., at an average price of 54.3 cents per bbl.; coal, 58,099 tons. specific taxes from iron mines in 1889 amounted to \$58,296.28; from copper mines, \$32,708.80. [For State Government, census returns, etc., see Appendix.

Michigan has high repute for its State University, its fine system of public schools, and low percentage of illiteracy (only 4 per cent by the last census), the beauty and superior character of its cities and many of its towns for most purposes of pleasant residence, and for the richness of its material resources. By the census of 1880 it was first among the States for iron, copper, salt, and lumber; second, for total value of non-precious metals produced; third, for wool; fourth, for wheat, buckwheat, potatoes, hops, and sheep; fifth, for power employed in manufacturing; sixth, for butter and average daily attendance upon the public schools; seventh, for number of manufactories and of dwellings, value of factories and of dwellings, value of farms and their equipment, and persons engaged in material industries; and eighth for school-houses and pupils in public schools, males of voting age, farm products, and capital in-

in manufactures. Returns 1890 may from the census of change some of these relative statements, but not importantly.

The railroads of Michigan which maintain some sort of corporate existence, including logging or lumber roads, number about 75; but for pur poses of operation the passenger roads are grouped under about one-third as many titles, heads, or systems, pretty nearly as given below. Mileage is generally given as in the Railroad Commissioner's Report for 1889, and leading officers as in the Travellers' Official Guide for November, 1890.

Chicago & Grand Trunk Railway, from Port Huron to ('hicago, 335 miles, in Michigan 224. Jos. Hickson, Montreal, President; W. J. Spicer, Gen'l Manager, Detroit; Jas. H. Muir, Treasurer, Det.; A. B. Atwater, Sup't, Det.; Geo. B. Reeve, Traffic Manager, Chicago; W. E. Davis, Gen'l Passenger Agent, Chicago; W. E. Davis, Gen'l Passenger Agent, Chicago. The Grand Trunk system also operates the Detroit, Grand Haven, & Milwaukee R. R., Detroit to Grand Haven, 189 miles; the Michigan Air-line Division, Lenox to Jackson, 106; Toledo, Saginaw, & Muskegon (Ashley to Muskegon), 96; Detroit to Fort Gratiot, 60.7; and has recently acquired the Cincinnati, Saginaw, & Mackinaw, West Bay City to Durand, 53. Chicago, Kalamazoo, & Saginaw, Kalamazoo

Chicago, Kalamazoo, & Saginaw, Kalamazoo to Hastings, 30% miles. Fred'k Bush, Kal., Pres. and Gen. Manager; H. C. Potter, Sec'y, etc., Kal.

Chicago & Northwestern. This great system has a total mileage of 4250, of which 3814 tem has a total mileage or 420, or which 2014 are in Michigan—Menominee to Michigamme, Powers to Watersmeet, Florence to Crystal Falls, and Narenta to Metropolitan, all in the Upper Peninsula. Marvin Hughitt, Pres.; John M. Whitman, Gen. Man.; M. L. Sykes. Sec'y and Treas.; W. A. Thrall, Gen. Pass. Agt.; H. R. McCullough, Gen. Frt. Agt., all Chicago.

Chicago & West Michigan, 2083/ miles, 1744/ miles in Michigan, from Indiana line to Big Rapids, with short branches. Nath'l Thayer, Pres., Boston; Charles M. Heald, Gen. Man., Grand Rapids; George De Haven, Gen. Pass. Agt., Grand Rapids.

Cincinnati, Jackson & Mackinaw, Toledo to Allegan, 156 miles. Walston H. Brown, Re-ceiver, New York; F. B. Drake, Gen. Mgr.; J. B. Flanders, Supt.; T. C. M. Schindler, Gen. Frt. and Pass. Agent, all of Toledo.

Cincinnati, Wabash, & Michigan, Anderson, Ind., to Beuton Harbor, 33½ miles in Michigan. D. J. Mackey, Pres., Evansville, Ind.; Norman Beckley, Gen. Man., Elkhart, Ind.; O. W. Lamport, Sup't, Wabash, Ind.; Edgar H. Beckley, Gen. Pass. Agt., Elkhart; Darwin F. Coe, Gen. Frt. Agt., Elkhart.

Detroit, Bay City, and Alpena, Alger to Alpena, 105 miles, with 26 in branches. R. A. Alger, Pres., Detroit; Milo Eastman, Gen'l Supt., East Tawas.

Duluth, South Shore & Atlantic, St. Ignace to Houghton, 245 miles, with branches Nestoria to Bessemer 93, and Soo Junction to Sault Ste. Marie 47. Sam'l Thomas, Pres., L. M. Schwan, Sec'y, W. A. C. Ewen, Treas., all N.Y.; W. F. Fitch, Gen. Mgr., D. L. Philbrin, Sup't, Wm. Orr, Gen. Frt. Agt., all Marquette; C. B. Hibbard, Gen. Pass. Agt., Minneapolis.

Flint & Pere Marquette, Monroe to Ludington, 253/4 miles, and 100 in branches. W. W. Crapo, Pres., New Bedford, Mass.; D. Edwards, Asst. Gen. Manager; H. C. Potter, jr., Sec'y and Treas., Sanford Keeler, Supt., A. Patriarche, Gen. Frt. Agt., all East Saginaw.

Grand Rapids & Indiana, Ft. Wayne, Ind., to Mackinaw, 36614 miles, in Michigan 31314, branches 4214. W. O. Hughart, Pres. and Gen. Mgr.; W. R. Shelby, Vice-Pres. and Treas.; E. C. Leavenworth, Gen. Frt. Agt.; C. L. Lockwood, Gen. Pass. Agt., all Grand Rapids.

wood, Gen. Pass. Agt., all Grand Rapids.

Lake Shore & Michigan Southern (total mileage 1409\(\frac{1}{2}\)), Chicago to Buffalo, in Michigan 570 miles, including Detroit, Monroe, & Toledo R. R., Detroit & Chicago R. R. (Fayette Franch), Detroit, Hillsdale, & Southwestern, Kalamazoo, & Mite Pigeon, Northern Central Michigan Jonesville to North Lansing), and Fort Wayne & Jackson. W. K. Vanderbilt, Ch'n of Board of Directors, New York; John Newell, Pres. and Gen. Mgr., Cleveland, O.; E. D. Worcester, Vice-Pres. Sec'y and Treas, N. Y.; P. P. Wright, Gen'l Supt., Cleveland; S. S. Hand, Supt. Toledo and other branches, Detroit; C. P. Leland, Auditor, Cleveland; J. J. Smith, Gen. Pass. Agt., Cleveland; J. T. R. McKay, Gen. Frt. Agt., Cleveland.

Manistee & Northeastern, Manistee to Inter-

Manistee & Northeastern, Manistee to Interlochen, 45 miles. Edw. Buckley, Pres. and Gen. Mgr.; Wm. Douglas, Gen. Supt., both Manistee.

Michigan Central; mileage of present system, 1554.37; in Michigan, 1049 3, including main line, Jackson, Lansing, & Saginaw R. R. (with Mackinaw Division), Detroit & Bay City, Michigan Air-line (Jackson to Niles), Grand River Valley (Jackson to Grand Rapids), Toledo & Detroit, Kalamazoo & South Haven, Michigan Midland (Lenox to St. Clair), Saginaw Eay & Northwestern (Pinconning to Gladwin), South Bend Division (from Niles), Battle Creek Division (to Findlay), etc. C. Vanderbilt, Ch'n of Board, New York; H. B. Ledyard, Pres. and Gen. Mgr., Detroit; E. D. Worcester, Vice-Pres. and Sec'y, N. Y.; Henry Pratt, Treas, N. Y.; D. A. Waterman, Auditor, Detroit; Rob't Miller, Gen. Supt., Det.; O. W. Ruggles, Gen. Pass. Agt., Chicago; A. Mackay, Gen. Frt. Agt., Chicago.

Milwaukee & Northern, Milwaukee to Champion, 253 miles; in Michigan, branches Sidnaw to Ontonagon 46, and Menominee to Ellis Junction 22. A. J. Earling, Gen. Mgr., Chicago; W. G. Collins, Gen. Supt., Geo. H. Hafford, Gen. Pass. Agt., J. J. Coleman, Gen. Frt. Agt., all Milwaukee.

Mineral Range and Hancock & Calumet R. R.'s; Houghton to Red Jacket, 15 miles, and H. to Lake Linden, 11.2. Chas. Bard, Pres., New York; John Tully, Sec. and Treas., C. A. Wright, Gen. Mgr., Hancock.

Minneapolis, St. Paul, & Sault Ste. Marie, 7944; miles, 192 in Michigan, Wisconsin line to Sault. F. N. Finney, Pres.; W. L. Martin, Sec. and Treas.; F. D. Underwood, Gen. Mgr.; H. L. Shute, Traffic Mgr.; C. B. Hibbard, Gen. Pass. Agt.,—all Minneapolis.

Pontiac, Oxford, & Northern, Pontiac to Caseville, 100 miles. Geo. W. Debevoise, Pres., N. Y.; Jas. Houston, Gen. Supt., Pontiac.

Saginaw, Tuscola & Huron, Fast Saginaw to Bad Axe, 67 miles. W. L. Webber, Pres.; E. T. Judd, Treas.; M. V. Meredith, Supt., all East Saginaw.

Toledo & South Haven, Lawton to South Haven, 36.6 miles. Lucius Clark, Pres., South Bend; John Ihling, Supt., Lawton.

Toledo, Ann Arbor, & North Michigan, Toledo to Frankfort, 299 miles (at present to Copemish 275), and branches 11. J. M. Ashley, Pres.; H. W. Ashley, Gen. Mgr..—both Toledo; J. B. Connors, Supt., Owosso; A. J. Paisley, Gen. Pass. Agt.; W. H. Bennett, Gen. Frt. Agt., Toledo.

Wabash Western, Detroit to Clymer's, Ind., 385.3 miles, in Michigan 79. O. D. Ashley, Pres., N. Y.; Chas. M. Hays, Gen. Mgr., St. Louis, Mo.; J. C. Otteson, Sec., N. Y.; F. L. O'Leary, Treas., St. Louis.

There are also the Au Sable & Northwestern, Au Sable to Potts, 37 miles; the Frankfort & Southeastern, Frankfort to Copemish, 25: short sections in the Upper Peninsula of the Green Bay, Wenona, & St. Paul, and the Wisconsin Central; the Lowell & Hastings, Lowell to Logan, 12; St. Joseph Valley, Buchanan to Berrien Springs, 11; the Mason & Oceana, Buttersville to Stetson; and a number of logging roads that carry passengers.

The State institutions not illustrated and annotated in the Calendar of this issue of the Year-book, are the State Agricultural College, Rev. Clute, President, established near Lansing in 1855; the Michigan Mining School, founded at Houghton in 1885, M. E. Wadsworth, Director; the Michigan School for the Blind, located at Lansing, 1879, George Barnes, Superintendent; the Northern Michigan Asylum, Traverse City, opened Nov. 30, 1885, Dr. James D. Munson, Medical Superintendent; Reform School, Lansing 1885, C. Gower, Sup't; and the Detroit House of Correction, a city institution, but used also by the State for the custody of female prisoners.

The colleges of Michigan, except those named above, are the State University with its attached professional and technical schools, Ann Arbor; the State Normal School, Ypsilanti; Detroit College, Catholic; Albion College, Methodist Episcopal; Adrian College, Methodist Protestant; Kalamazoo College, Baptist; Hillsdale College, Freewill Baptist; Hope College, Holland, Reformed; Alma College, Presbyterian; Battle Creek College, Seventh-day Adventist; and Olivet College, Congregational.

By the last report of the Secretary of State, the whole number of farms in the State is 138,190; acres of improved land, 7,979,608; unimproved land in farms, 4,583,129; average size of farms, 90.83 acres. The area of improved land is 114,440 acres, and average size of farms one-fifth of an acre, greater than in 1889.

Michigan Press formed and first meeting was held at Jackson, Jan. 23, 1868. 26 newspaper

men present. E. B. Pond of the Ann Arbor Argus was first President, and Jas. O'Donnell of the Jackson Citizen first Secretary Meetings were held regularly thereafter each vear until 1877, when Executhe tive Commit-



PRES'T WM. P. NISBETT.

tee for some unexplained cause failed to call the body together, as required by the constitution, and after this no meeting was held until September, 1878, when an informal one was called at Detroit, and the next took place at Lansing, Jan. 7, 1879. This was followed by another meeting, a very enthusiastic and well attended one, at Ann Arbor, in the year following. next, 16th annual meeting, was called for Detroit the following spring, but unfortunately the date was set near the spring election, and scarcely a dozen newspaper men were present. From this time the interest among the publishers of the State in their State Association seemed to increase, and ever since the meetings have been well attended and very interesting and enjoyable.

The 17th annual meeting was held at Bay City in June, 1884, followed by an excursion to Mackinaw and Marquette; 18th at Traverse City, a joint meeting with the West Michigan Association. This was the largest gathering of newspaper men ever held in the State; nearly 500 editors and their wives present. It was followed by an excursion to Charlevoix and Petoskey. The 19th was larly so from the interest shown by at Detroit citizens in seeing the Associa-strength Dec. 1, 1890, 2496. State tion properly entertained. The 23d encampment of all in July or August annual meeting occurred at Grand each year—last two years at Battle Rapids in July, 1889, followed by an Creek. [For roster of general and

Association was excursion to St. Joseph, thence to Chicago by boat.

> The meeting for 1890, which occurred at Saginaw in July, was largely attended, and one of the best in the history of the Association. It was followed by an excursion to Cheboygan, Sault Ste. Marie, Iron Mountain, St. Paul, and Minneapolis, the Yellowstone National Park, and Salt Lake City. Nearly 500 attended this meeting, 300 took the first trip to Sault Ste. Marie, 200 to Iron Mountain and St. Paul, and 60 to the Yellowstone, the long trip occupying about 30 days.

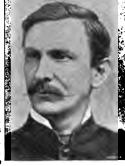
The present officers of the Association: Pres., Wm. P. Nisbett, of the Big Rapids Herald; Vice Pres., Fred Slocum, Detroit Journal; Sec., B. J. Lowery, Howard City Record; Treas., James Schermerhorn, Hudson Gazette. President Nisbett, whose portrait accompanies this sketch, first won newspaper fame as the publisher of the Pontiac Bill Poster, which paper he established and for several years conducted with signal success. Later he engaged in the real-estate business at Denver, but like most newspaper men soon returned to his first love, purchasing the Big Rapids Herald, which paper he has since published. He also prints a daily edition called the Bullein. Mr. Nisbett is in the prime of life, and ranks as one of the brightest newspaper men of Michigan.

Military Department, Michigan, consists of the Governor as Commanderin-Chief, with a staff of 15, the Adjutant-General being in charge of the Military Bureau at the Capitol, and the Quartermaster-General in charge of the State property; and a Military Board of three, holding for two years. This Board is an advisory body to the Commander-in-chief on all State military matters, prepares rules and regulations for government of the State militia, has charge of the soldiers' cemetery at Detroit, and controls admissions to the Soldiers' Home at Harper Hospital, Detroit, or the State asylums for the held at Coldwater the next year, and insane. The State troops are organized was also largely attended and followed by an excursion to Niagara Falls. The Second and Third full, and the First 20th was held at Port Huron, July, and Fourth battalions of eight com-1887; 21st in Detroit, May, 1888. Both panies each, the last altogether a Dewere very enjoyable, the latter particu- troit command, except a company each Monroe and Ypsilanti.

company officers, see Appendix.]

Eugene Robinson, who holds the position of Brigadier-general, in Command of Michigan's militia, was born

May 24, 1838, at Bingham-ton, N. Y. The next year his parents removed to Detroit. After graduating from the high school he went to work John 🖟 under F. Monroe as surveyor and engineer.
After two
years of rail-



GEN'L EUGENE ROBINSON.

road work he opened an office for himself in the old Arsenal building on the site of the present City Hall.

He became a member of the Light Guard in 1857, and when the first call for troops came in 1861 Gen. Robinson enlisted in the First Michigan regiment as a sergeant. He fought at Bull Run, and was promoted to sergeant-major. At the expiration of the three months for which he had enlisted Gen. Robinson returned to Detroit and was made city surveyor. When the board of public works was created in 1872, he was mustered out of the municipal service and has been a contractor ever In 1881 the Detroit military companies were formed into the First Michigan battalion. Gen. Robinson was made colonel of the battalion, and when, in 1883, the battalion was changed into the Fourth Regiment by the addition of the Ypsilanti and Monroe companies, he was continued in that position

Oct. 1 last Gen. Chas. Brown, colonel of the Third Regiment, resigned command of the State troops, and Col. Robinson was made Brigadier-general

by Gov. Luce.

In this connection an explanation should be made of the use of Captain Abel's portrait on page 15, and the absence of those of the other captains. It was the intention of the DETROIT JOURNAL to publish the portraits of all Tuscan, 1808; Turkish, 1826; Scotch, the captains, and this plan was abandoned only when in October it was learned that the December company Swedish and Danish, 7344; German, 1808; Turkish, 1826; Scotch, 1884; Arabian, 2143; Irish, 2240; Durch and Prussian, 6480; Flemish, 6869; Learned that the December company Swedish and Danish, 7344; German, 1886; Scotch, 1886; S

brigade field-and-staff, regimental and changes, and that these changes would occur about the time the Year Book was being issued, or too late for correction. Before this, however September), the JOURNAL had the first 16 pages (one "form") printed, to use as "dummy" in soliciting advertising for the back part of the book. Capt. Abel's name belonged on page 15, as coming early in the alphabet, and his resignation was learned as the work of printing was beginning, or too late to do more than insert the word "late" before the word "Captain." This explanation is given to prevent the State military from thinking the Journal guilty of intentional discourtesy in using one and omitting all the others.]

> Millionaires.—New York has more millionaires than any other city in the world, and they have the greatest average wealth Berlin is also a great and wealthy city, but it has only millionaires, or one to every 8000 of population; while New York has over 1000, or one to every 1600 people. Estimates in November last show an increase of 21 millionaires in this city over 1889, and 50 over 1888. John D. Rockefeller leads the list with \$135,000,-000 and an income of \$6,000,000 a year, while his annual expenditure is only \$100,000. At 70 years of age it is estimated that his wealth will amount to 250 or 300 millions. Wm. Rockefeller his brother is also many times a millionaire. Henry M. and John H. Flagler, also Standard oil magnates, are very wealthy, the former worth **\$6**0.000,000. Every fourth house on Fifth avenue is said to be that of a millionaire. Jay Gould has \$75,000,000. W. W. and Wm. Astor, W. K., Cornelius, Fred W., and George Vanderbilt are immensely rich by inheritance, apart from their own gains. Other well-known names are C. D. Huntington, Andrew Carnegie, Henry Hilton, H. Victor Newcomb, Stephen V. White, Eugene Kelly, Calvin S. Brice (Senator from Ohio, though classed with New York millionaires), Henry Villard, Robert Bonner, and many others.

Mile. — The Werst mile, 1167 or 1377 yards; Roman, 1628 or 2025; English and American, 1760; Italian, 1766; elections would probably make several 8106; Vienna post-mile, 8296; Swiss,

9153. Experiments show that a man can swim an English mile in 26 minutes 52 seconds, can walk it in 6:23, on snowshoes in 5:393, run it in 4:133, ride it on a tricycle in 2:49.4 or bicycle in 2:29.8, skate it in 2:12.6, cover it with a trotting-horse in 2:83 or a runner in 1:393, or a locomotive in 501 seconds.

Mine.—The deepest in the world is at St. Andre du Poirier, France, and yearly produces 300,000 tons of coal. worked with two shafts, one 2952 feet deep and the other 3083. The latter shaft is being deepened, and will finally touch the 4000-foot level. A remarkable feature in this deep mine is the comparatively low temperature experienced, which seldom rises above 75° Fahrenheit.

Mississippi, Source of the. - The Minnesota Historical Society has settled a question raised by one Capt. Glazier, finding that neither Itasca, Whipple, nor Elk Lake is the source, but rather two small lakes west of Itasca and about 100 feet above it. So strong is the revolt against the Glazier claims that a law has been enacted affirming the name Elk Lake for the sheet he called Lake Glazier, and forbidding use in the schools of any books or maps bearing the latter title.

Money.—Articles or substances used (most of them still used in some parts of the world) as money are skins of animals, oxen, sheep, slaves, greenstone, whale's teeth, eggs, cakes of tea, musket-balls, tobacco, shells, cocoanuts, eggs, corn, beans, codfish, red ochre, red feathers, salt, silk, wood, mulberry bark, leather, gold, silver, platinum, tin, copper, iron, and lead. Quills of gold-dust and bags of chocolate grains were used by the Aztec races. gold value of ancient money was about as follows: Shekel—gold, \$5.69, silver cents; maneh—gold, \$569, silver \$32; talent — gold, **\$**56,900, silver \$1660; Persian daric or drachm, \$5.52; silver—beka 26½ cents, gerah 2½ cents, stater ("piece of money") 53 cents; denarius ("penny") 14 cents; copper shekel 3.14 cents, assarium + cent, quadrans ½ cent, mite ½ cent. [See also "Coins" and "Dollar"]

Monosyllables. - A new sonnet, to show the expressiveness and force of single-syllabled words, has been devised by Prof. W. C. Richards, Ph. D., the well-known scientific lecturer, as follows:

Mine be the force of words that tax the tongue But once, to speak them full and round and clear.

They suit the speech or song, and suit the ear Like bells that give one tone when they are

rung, Or bird-notes on the air, like rain-drops flung, That pour their joy for all who pause to hear.
Their short, quick chords the dull sense charm
and cheer,

That tires and shrinks from words to great length strung.

Strong words of old that shot right to the brain, And hit the heart as soon, were brief and

terse. Who finds them now and fits them to his sling, Smooth stones from books of English are his

gain, Which shall make strong his thought in prose

Wills he with scribes to write or bards to sing.

Montana is an immense State, third in size of the North American States. Its greatest length east and west is 540 miles; width, 275; area 145,776 square miles, at least one-third of them mounaltitude, 3000 ...
The output Mean tainous. above the level of the sea. of precious metals in 1887 was over \$25,-000,000, an increase of \$17,000,000 in five years. Population 131,769, against 39,159 in 1880, an increase of 92,610, or nearly 300 per cent. Butte City is the largest and busiest mining camp in the world.

Mortality.—According to our census of 1880, the annual bills of mortality in different countries, from the latest statistics accessible, were about as follow: In Italy, per 1000 of population, 30.5; Spain, 29.7; Austra, 29.6; German Empire, 26.1; France, 23.6; Belgium, 22.4; England, 20.5; Sweden, 18.1; United States, 18, the smallest deathrate of all.

Mountain, highest in the world, remains Mt. Everest or Gaurinsanhur, in the Himalayas, at 29,025 feet, almost There is no exactly 51 miles, high. such eminence in New Guinea as Mt. Hercules, with a hight of 32,768 feet, as sometimes published. A joint expedition of the American Geographical Society and U. S. Geological Survey, returning from Alaska last October, reported the hight of Mt. St. Elias as heretofore over-estimated. They found it but 13,500 feet, against 19,500 before figured, which is exceeded by several peaks in the United States.

Mt. Hope Congregational Church, Detroit, grew from mission Sunday school formed Nov, 1883, in an unfinished cottage on Twenty-fifth st., used until Oct., 1889, when removal was made to present site. Church organized about

same time, and now numbers about 60. 4 P. M. The price of admission is 25 It is under care and support of the First Congregational church. Rev. Wm. Mitchell, pastor; residence, 70 Maybury Allan Bourn, Sup't of Sunday school; office, M. C. R. R. depot.

Museum of Art, Detroit, is the direct outgrowth of the Art Loan Exhibition of 1883, which was conducted for the sole purpose of awakening an interest in art in Detroit, and to make possible the founding of an Art Museum and Art School on a scale commensurate with the importance of the city of Detroit. The exhibition was visited by 134,000 people and netted a handsome surplus, and was immediately followed by the raising of \$100,000 by Wm. H. Brearley for



the permanent Art Museum. Jeffersonave. residents donated two lots on that avenue, corner Hastings, valued at \$25,000, on condition that the building should be located on them. The lots should be located on them. were accepted and the building, costing \$56,385.44, was erected, so that the formal opening occurred on September The Museum is controlled by a board of eight trustees, two of whom are nominated by the mayor and elected by the city common council, and eight of the trustees are annually elected by the "corporation," who consist of those who have donated in money or art works the sum of \$1,000 or more to the Museum. The building, with its fine permanent collection, is open to visitors from 1 to 4 P. M. on Mondays, truth can avail unless practically applied. from 9 A. M. to 4 P. M. on all other Therefore those who seek the welfare week-days, and on Sundays from 2 to of man must endeavor to suppress the

cents on week-days and free on Sundays.

The Academy (Art School) of the De-troit Museum of Art was founded in From its inauguration the school has been in every way a success, and it is now one of the best art schools in the country. During the first four terms the total attendance of scholars was three hundred and sixty-two, the largest attendance during one term being sev-But with the present term enty-eight. a new building has been erected. specially designed and built for the accommodation of classes, with a north light and large and airy studio. Special inducements have been offered in the way of prizes, there being eight scholarships offered in the various classes, in addition to the European scholarship of \$1000 offered in the life class to the competition of all students who have been a full school year in the Academy. So well have these advantages been appreciated that the attendance for the present term has increased to one hundred and fifteen, while inquiries have been received from intending scholars from all over the States. The rates of tuition are as low as in any art school in the country which is not absolutely free, and the corps of professors is able and enthusiastic. desirous of admission or information in regard to the school should address the Secretary, Detroit Museum of Art.

Nationalists.—The recent American reformers calling themselves by this name are an outgrowth of the agitation resulting from the remarkable book of Edward Bellamy, "Looking Backward." Their papers and discussions look to the nationalization of industry, ownership and control of all manufacturing and other industries by Government. Their Declaration of "The principle of the Principles says: Brotherhood of Humanity is one of the eternal truths that govern the world's progress on lines which distinguish human nature from brute nature. principle of competition is simply the application of the brutal law of the survival of the strongest and most cunning. Therefore so long as competition continues to be the ruling factor in our industrial system the highest development of the individual can not be reached, the loftiest aims of humanity can not be realized.

system founded on the brute principle | founded the NATIONAL JOURNALIST, competition and put in its place another based on the nobler principle of association. But in striving to apply this nobler and wiser principle to the complex conditions of modern life, we advocate no sudden or ill-considered charges; we make no war upon individuals; we do not censure those who have accumulated immense fortunes simply by carrying to a logical end the false principle on which business is now based." Nationalist Clubs have been organized in many States and have many thousand members, including some of national renown. A club of moderate size and activity has existed in Detroit since the winter of 1889-90.

National Editorial Association.-This organization is made up of delegates from the various associations of editors and publishers of the United States. The basis of representation is one delegate for each twenty members of the affiliating bodies, the President and Secretary of each also being made members by virtue of their office. The declared object is "the advancement of the material interests and extension of the social relations of the editors and publishers of the United States." the last annual meeting held in Boston, June 24-27, forty-eight associations were represented by two hundred and eighty delegates. A great variety of topics, relating to the editing, printing, and publishing of newspapers, were discussed and action taken looking to co-operation in regulating the prices and in securing certain lines of advertising, as well as in attempts to obtain needed legislation and to forward other desired objects.

The Association was organized in New Orleans. La., through the persistent efforts of B. B. Herbert. then President of the Minnesota Editors' and Publishers' Association. and editor of the Daily Republican



B. B. HERBERT.

and the Weekly Advance-Sun at Red Wing, Minn. He has since, in accord-

published at 21 Plymouth Place, Chicago, Ill., of which he is now editor, and which is the official paper of the organization and devoted to the forwarding of all matters that pertain to organized journalism and the upbuilding of the editorial profession and the business of publishing and printing. Annual conventions have been held as follow: 1885, New Orleans; 1886, Cincinnati, followed by a trip through Florida; 1887, Denver, with an excursion through the Rocky Mountains; 1888, San Antonio, followed by a trip to the old city of Mexico; 1889, Detroit; 1890, Boston; and the 1891 meeting will be in St. Paul, Minnesota, on July 16. The President of the Association is E. W. Stephens, of Columbia, Missouri.

Naturalization.—The formalities for making a foreigner a citizen in this country are simple and easy. After five years' residence here he may present himself before any court of record (having seal and clerk), and swear that he renounces all foreign allegiance and will support the constitution of the United States, of which he declares his intention to become a citizen. At least five years afterwards, and when he has resided a year or more in the State where he applies, he must again go into court, exhibit his declaration papers, and make a showing of good moral character, when he will be admitted to full citizenship. In about one half of the States, including Michigan (where he must have resided 2½ years), he can vote upon his declaration; in the other States he must have full naturalization. His children under 16 at the time of naturalization, and all born subsequently, are treated as if native born. An honorably discharged soldier of the army may become a citizen without previous declaration of intention, if he has lived in the country for a year.

Nebraska gained in population threefold (from 28,841 to 122,993) 1860-70, 270 per cent (to 452,433) 1870-80, and 63.6 per cent (to 740,645) 1880-85. Its present population is 1,056,793, an increase of 135.17 per cent since 1880much the largest of any State not very recently admitted.

New Mexico is the greatest of the remaining Territories, not counting Alaska. It has an average length and breadth of 368 by 335 miles, and an ance with a vote of the Association, area of 122,444 miles. It could contain the entire States of New England and New York, and nearly New Jersey besides.

New Jerusalem Church, Cass ave. and High st., Detroit, was dedicated Nov., 1872. Value of church property, about

\$20,000; sit tings, 300 membership. 80. Sunday morning worship at 10:30 evening at 7:30; Sunday school at 12. Expenses are met by weekly voluntary offerings, and all seats are free; public cordially in



REV. A. F. FROST.

Albinus Finney Frost was born at Olivet, Mich., May 11, 1847, graduated at Olivet College, studied at the Theological School of his church at Waltham, Mass., was ordained at Bridgewater, Mass., Oct. 16, 1873, preached at Salem, Mass., 1872-79 and Cleveland, O., 1879-83, and took his Detroit pastorate Sept., 1883. Residence, 417 Fourth ave.; call at any time.

Ninde M. E. Church, Twenty-eighth and Visger sts., Detroit, was organized in 1886, and dedicated its chapel in

December; value \$3500. Membership, 70; Sundayschool, 110. Sunday preaching at 10:30 and 7; Sunday school at 12. Pastor Guy M. Bigelow was born in Detroit Jan. 2, 1859: graduated with class of Univ.



REV. G. M. BIGELOW.

of Mich.; joined Detroit Conference 1883, and was appointed to Ninde church Sept., 1890. Residence, 1171 Scotten ave.

Normal School, Michigan.—This fine institution had its origin in the feeling

branches of the State University, which prompted the people to demand special means for the preparation of teachers. In answer to numerous petitions, the Legislature of 1849 passed a law for the foundation of a normal school, which

located at Ypsilanti, opened in 1852, and graduated its first class two vears after. Its governing body is the State Board of Education -three members, elected by the people, with the Superin tendent of 🝱 Public In-



PROF. J. M. B. SILL.

struction for Secretary ex-officio. Prof. J. M. B. Sill, Principal State Normal School, was born Nov. 23, 1831, in Black Rock, N. Y., now part of Buffalo; came with parents to Jonesville, Mich., 1836; among first graduates from State Normal School, 1854; taught in the school till 1863; first Superintendent of Schools Detroit Public 1863-65; Principal Det. Female Seminary 1865-74; again Supt. Det. schools, 1874-86; Principal Normal School 1886 to date; also President of Teachers' Association, 1861; Regent of State University, 1867-70; and honorary M. A. by conferment of University in 1878.

North Baptist Church, Detroit, organized Feb. 10, 1888, with a membership of 47, has a neat chapel at the Boule-

vard and Woodward ave., dedicated Nov. 3,'89, and a parsonage adjoining, the whole property worth about \$22,000. Reg. ular sittings, 350, with total capacity of 400. Membership, 111; Sundayschool, 200,



REV. R. E. MANNING.

over half in the primary department, the success of consequent upon the break-up of the which is mainly due to the energy and devotion of its Superintendent, Mrs. J. P. Johnson. Sunday services 10:30 and 7:30. Bible-school 12, young people's meeting 6:45; Wednesday evening prayer-meeting 7:30. Pastor R. E. Manning was born March 31, 1840, in Penfield, Monroe Co., N. Y., entered the ministry 1874, and his present field Dec., 1887. Residence at parsonage, No. 17 Boulevard west.

Newspapers.—The total number in different countries is estimated at 43,000 about as follow: United States, 17,-000; Germany, 5500; Great Britain, 6000; France, 4092; Japan, 2000; Italy, 1400; Austria-Hungary, 1200; Asia, exclusive of Japan, 1000; Spain, 850; Russia, 800; Australia, 700; Greece, 600; Switzerland, 450; Holland, 300; Belgium, 800; all others, 1000. About onehalf of all are printed in the English By Rowell's Newspaper language. Directory, periodicals of all kinds in this country in 1889 numbered 16,319, of which 2,959,566,500 copies were printed during the year.

Oceans.—The greatest depth in the several oceans yet ascertained is: In the North Pacific, 27,667 feet; South Pacific, 26,328; North Atlantic, 27,108; South Atlantic, 23,935; Indian Ocean, 19.019.

Ocean Steamers.—Three magnificent ones have been recently built, expressly for speed, and each expected to break the record of the Inman steamship "City of Paris," which crossed the Atlantic in 5 days, 19 hours, and 18 minutes. The "Normannia," built by the Hamburg American Line, is a ship of 8000 tons and has engines of 12,000 horse-power. "La Touraine," of the French Line, is superbly decorated and The other is cost over \$1,500,000. the "Majestic," of the White Star Line.

Ocean-waves, Height of.—By a very ingenious arrangement of sensitive aneroid barometers with recording ap paratus, floated on the surface, it has lately been ascertained that ocean-waves reach a height of 40 feet in a fairly heavy sea. Measurements from violent gales are not yet reported.

Oil Pipe Lines .- Some of the pipelines conveying oil to the large cities are of surprising length, for such construc-That from Olean, N. Y., to the vicinity of New York City, is about 300 miles long: another, from Colgrove, Pa., to Philadelphia, nearly 280; others—Lima, O., to Chicago, over 200; Hillard's, Pa., to Cleveland, 100; Four-royal, 2 archbishops, 24 bishops, 485

mile, N. Y., to Buffalo, and Midway Station to Baltimore, 70 each; Carbon Center, Pa., to Pittsburg, 60. these, and several more, are owned or controlled by the great Standard Oil Company, under the name of the National Transit Company.

**Qranges.**—The shipment of 1890 from Southern California is estimated by the agents of the Southern Pacific Railroad at 3750 car-loads, against 2600 the year before. In 1888 the Riverside settlement of 6000 acres, near Los Angeles, produced fruit crops worth \$1,500,000, or \$250 an acre.

Paper.—Among the most remarkable recent manufactures from paper are a pulley of hydraulic-pressed pasteboard. with an iron core and strong casing, said to have greater friction than one of iron, and making it possible to use smaller pulleys and to save vibration by reducing the tension of belts. made from the well-known oil-paper employed for car-wheels. Handles for files and other tools are being made from compressed, chemically prepared paper, and are hard, smooth, light, durable, and very convenient.

Pardon is a name now often coupled with "Kermess," the title given to a fashionable form of charity festival or entertainment introduced quite recently Pardon is the old into this country. French word for the prayer now called the "Angelus," which supplies the theme of the famous Millet painting, and was given to it because pardons were granted to those who at the stroke of the bell, morning, noon, and sunset, should repeat the Angelic salutation, and thus aid in averting the danger of a threatened invasion. But in some parts of France, notably in Brittany, the word is used to designate assemblies of pilgrims held near churches or shrines of peculiar interest. Fires are often lighted on neighboring hills, and are a favorite feature of Breton fetes. It is believed that those who dance around nine of the fires before midnight will be married within the year. Pardon, like the Kermess, gradually assumed in addition to its devotional character that of a rustic festival. Dancing is a pronounced feature of the festivities, and is participated in with a frenzy of delight. This is a pardon [See "Kermess."] fair.

English hereditary peers, and 16 Scotch and 28 Irish representative peers. The former in the last class are elected for each Parliament from the whole body of Scotch peers, the latter for life from the Irish peers. The House of Commons has 670 members, elected by the boroughs, county divisions, and universities of the entire United Kingdom, but not the colonies. The reform suffrage act of 1884 enlarged the number of electors to Parliament from 3, 152,910 in 1883 to 5,836,907 in 1888.

Pascal .-- A mighty genius was the French thinker, writer, and preacher, Pascal. At 12 years of age, with bars and hoops, he invented mathematics; at 16, wrote the most learned treatise on conic sections that had been seen for centuries; at 19, reduced to machinery a science which exists entirely in the mind; at 23, demonstrated the phenomenon of the weight of the air, and destroyed one of the great errors of ancient physics; at an age when other men scarce begin to live, having run through the circle of human sciences, he perceived their insufficiency and turned his thoughts to religion. Between the time, then in his 39th year, and his death, though always infirm and suffering, he established the language which Bossuet and Racine spoke, and in his writings gave specimens of the most perfect logic; and finally, in the brief intervals of pain, resolved, by abstraction, one of the most difficult problems in geometry, and left on paper thoughts which seem as much divine as human.

Passion Play.—During the Middle Ages "Miracle" (mystic or religious) plays were common throughout Europe. They retain-

ed their hold upon the affections of all classes for several hundred years, and were not displaced even by the religious com motions of the 16th century. Many partisans on either side approv-



ed of them, Joseph MAYER, the "Christ."

and Luther is reported to have said that patents, 121; for registration of tradethey often did more good and produced marks, 1617; for registration of labels,

more impression than sermons. The European wars, however, and the abuses which crept into these sacred dramas and compelled the civil authorities to interfere, led gradually to their entire In 1811 the "Passion disuse in 1790. Play" was revived in the town of Oberammergau, a little mountain village in the Bavarian Tyrol, 75 miles southwest of Munich, where in consequence of a vow made by these villagers, as a result of which they believe that a plague was stayed, the play has since been produced every tenth year. 1880 over 120,000 people attended it, and the receipts exceeded \$80,000. The recent representation (1890) was much more successful. Of the 1500 inhabi-

tants of the village, about 900 actually participate as. actors in the play. The drama covers the period of Christ's life, from the Last Supper to the A scension, and is said to be characterized by most devout and earnest feel ing, and to



ROSA LANG, the "Virgin Mary."

be strikingly The accomimpressive and effective. panying portraits are made from photographs taken in 1890 from the play direct. They are of Joseph Mayer, who takes the part of the Christ, and of Rosa Lang, who personates Mary, the mother of Jesus. Those who have attended the play, remark the wonderful adaptation of the peasants to the characters they assume, some indication of which may be gained from the two whose portraits accompany this article. Joseph Mayer personated the Saviour in 1870, 1880, and again in 1890. The one who took the part of John is already spoken of for the "Christus" in 1900, when the next representation will be given.

Patents.—The last report of the U. S. Commissioner of Patents shows operations of his bureau for the fiscal year ended June 30, 1890, as follow: Applications for letters patent, 40,201; for design patents, 1003; for reissue patents, 121; for registration of trademarks 1617; for registration of labels.

868; caveats received, 2330. Total 46,- Redman, B. E. Niles, Blissfield, C. H. 140, against 42,047 the previous year. Receipts for the year. \$1,347,203; expenditures, \$1,081,173: surplus, \$266,-030. against \$186,859 in 1888-89. ance in the treasury on account of the patent fund, \$3,790,556. Only 486 patents were issued by this office in 1837, against 21,477 fifty years after.

Patrons of Industry, recently appearing as a factor in politics, is the name of a comparatively new element in the long list of fraternal organizations. The order now numbers about 100,000 members in Michigan and probably as many more scattered throughout New York, Ohio, Indiana, Illinois, Wisconsin, Minnesota, South Dakota, Iowa, and Ontario. Rev. F. W. Vertican, of Port Huron, is called the father of the organization, he having first conceived the plan in 1884. F. H. Krause and D. W. Campbell, of the same city, were induced to join the project, and latterly I. R. Wadsworth, then superintendent of the P. H. & N. W. Railway. These four were the original incorporators. The first subordinate organization was effected in a little log house in Sanilac county, and others followed, the purpose of the organization being to bring the farming community into closer relation and secure their betterment along social, financial, and political lines. The first State convention was called at Port Huron in April, 1889, and was followed by a national convention held in the same city one month later. At this gathering a new constitution was adopted and a more thorough organiza-tion effected. The growth of the order has been rapid ever since, the work of organizing spreading into the other States in September of the same year. In January, 1889, F. H. Krause, who was grand treasurer of the order, began the publication of a monthly paper called the Patrons' Guide. This was called the Patrons' Guide. later made the official organ of the order and has reached a circulation of 75,-000 copies per month. In October 1889 a weekly paper called the Western Farm and Home was started by Mr. Krause, which has also been made an official organ of the order. The supreme association is the national organization; its supreme officers are: President, F. W. Vertican, Port Huron; Vice-President, John Andrew, Bad Axe; Secretary, I. R. Wadsworth, Port Huron; Treasurer, F. H. Krause, Port Huron; Sentinel, Charles Rice, Sparta; Whittum, Eaton Rapids.

Michigan was the first State to organize a grand or State association; the first grand president was F. S. Porter, of The present Grand of-North Branch. ficers are: President, A. S. Partridge, Flushing; Vice-President, C. V. De-Land, Jackson; Secretary, J. E. Taylor, Greenville; Treasurer, Jos. J. England, Caro; Sentinel, H. A. Daniels, Elva; Finance Committe, D. Conklin, Ula, G D. Moore, Medina, C. H. Morse, Carson Citv.

The plan also provides for county organizations, which are known as county associations, and also subordinate associations. These latter shall not be organized within three miles of another association.

The State of Ohio was next to organize as a grand association, which was accomplished in October last. The officers are as follows: President, Ira D. Smedes, Metamora; Vice President, W. H. Strong, Java; Secretary, Jerome Storms, Cummings; Treasurer. Frank Weirich, Colton; Sentinel, W. A. Phillips, Knoxville; Trustees, Samuel A. Justus, E. H. Ester, and John S. Hart.

Indiana followed close by electing the following grand officers: President, John Chalmers, Kendallville; Vice-President, Wilson Teeters, Fremont; Secretary, J. H. Eckles, Harlan; Treasurer, G. W. Hanes, Butler; Sentinel, A. J. Hinkle, Seybert; Board of Trustees, E. H. Sherman, Kendallville: J. C. Hodges, Waterloo; D. S. Kindeg. Elkhart.

Other States are expected to follow at an early day. The next national convention is called to be held in Lansing, Michigan, in May, 1891, and promises to be an important gathering.

In this same connection might be mentioned a new phase of the Patron plan which developed at the December meeting of the Executive Committee of the Grand Association for Michigan. held in Lansing. At this meeting there was organized and incorporated a company with a capital stock of \$100,-000, to be known as the Patrons' Comof the statement of Michigan. The officers are: President, C V. De Land; Vice-president, Geo. D. Moore; Secretary and Manager, D. A. Reynolds; Treasurer, C. H. Morse. The company's stock is sold at \$5 per share and the head office is located at Lansing, with Finance Committee, H. B. Gillard, branches at different points throughout

the State. It is virtually a purchasing agency for the membership, and also a distributing agency for farm products.

Pensions. — The late report of the Commissioner of Pensions shows 537,-944 pensioners upon the rolls, as follow: Army invalid, 392,809; navy invalid, 5274; army widows, etc., 104,456; navy widows, etc., 2460; survivors of War of 1812, 413; widows of soldiers of 1812, 8610; survivors of Mexican War, 17,158; widows of soldiers in such war, 6764. The Commissioner estimates 1,246,089 survivors of the Civil War July 1, 1890, about 106,000 of them 62 years old and upwards. announces the following classes entitled to pensions:

Any officer, including regulars, volun'eers, and militia, or any officer of the marine corps, or any enlisted man, however employed in the military or naval service of the United States, or in its marine corps, regularly mustered or not, disabled by reason of any wounds or injury received or disease contracted when in service and in line of duty.

Any master serving on a gunboat, or any pilot, engineer, sailor, or other person not regularly mustered serving upon a gunboat or war-vessel of the United States, disabled by any wound or injury received, or otherwise incapacitated while in the line of duty for procuring his subsistence by manual labor.

Any person not an enlisted soldier in the army, serving for the time being as a member of the militia of any State, under orders of an officer of the United States. or who volunteerof the United States, or who volunteered for the time being to serve with any regularly organized military or naval force of the United States, or who otherwise volunteered and rendered service in any engagement with rebels or Indians, disabled in consequence of wounds or injury passived in the line of of wounds or injury received in the line of or wounds or injury received in the ine of duty in such temporary service; but no claim of a State militiaman or non-enlisted person shall be valid unless prosecuted to a successful issue prior to July 4, 1874.

Any acting assistant or contract surgeon, disabled, etc., in the line of duty.

Any provost marshal, deputy provost, or enrolling officer disabled by reason of any wound or injury received in the discharge of his duty, from procuring a subsistence by manual labor.

The widows and minor children of those embraced in sections 4692 and 4693 of the pension

laws, by force of section 4702.

Widows of colored and Indian soldiers and their minor children, by force of section 4705.

Dependent mothers, fathers, and brothers and sisters of those embraced in section 4092

and 4693, by force of section 4707.

Officers and seamen of the navy disabled prior to March 4, 1861, by force of section 4728. Widows and minors of officers and seamen of the navy disabled prior to March 4, 1861, by force of section 4729.

Regulars or volunteers disabled in

Mexican war, by force of section 4730.

Widows and children of regulars or volunteers who died by reason of injuries or disease contracted in the Mexican war, by force of section 4781.

Widows and minor children of persons engaged in the Mexican and various Indian

wars, by force of section 4782.

Soldiers and sailors who served in the war of 1812, by force of section 4736.

Surviving widows of officers, soldiers, and sailors of the War of 1812, by force of section

Officers and seamen of revenue-cutters who have been or may be disabled or wounded in discharge of their duty while co-operating with the navy by order of the President, by force of section 4741.

Wounded privateermen, by force of section

Widows, children, dependent mothers and fathers, or orphan brothers and sisters of those soldiers who were murdered by guerrillas at Centralia, Mo., in 1864, by force of act of

March 8, 1875.
Surviving soldiers and sailors of the Mexican war, and the widows of the same, by force of

act of June 29, 1887.

Soldiers and sailors of the War of the Rebellion who served ninety days and were honorably discharged the service, and who are incapacitated for performance of manual labor, and for their widows, children, and dependent parents, by force of act of June 27, 1890.

Peripatetic Churches .- The Episcopal Bishop of North Dakota has a cathedral car just built, externally very much like a Pullman, but with a Gothic projection somewhat suggestive of a church. Inside it is neatly fitted for a church, with 75 sittings, chancel, altar, etc., and a small room for robing. It will be used in the Bishop's mission work along the railways, stopping a day or two at each place. A car of the same size (60 by 10 feet) and character is building for the Baptists, who will send two missionaries with it through the Northwest, in summer providing a larger auditorium in a tent. Church of England has a Gospel-ship for similar purposes plying from London to the fisheries of the North Sea; the Catholics a cathedral ship upon the Amazon; and Captain Bundy, an independent evangelist with headquarters Chicago, runs a small Gospelsteamer upon the Great Lakes. foreign mission societies have a number of steamers and sailing-vessels in their service, but none of them fitted with audience-rooms.

Pocket, the, was first a purse or pouch, and then a girdle. The ancient Hebrews carried a pouch, and the Roman matrons a handbag, which originated the modern reticule. were first made of netting, later of leather. The Romans came nearer to having a pocket than any other people until modern times. A portion of the toga was bound in a knot under the left breast, and a protuberance was there formed divided into many folds, which was named sinus, and answered the purpose of a pocket. The Roman matrons concealed valuables about about 1000 were on the reports of Intheir persons in the upper part of the stroflum, a kind of corset, fitting the waist tightly, yet loose at top. Charlemagne carried a traveling pouch which was suspended from his person. The Saxons had purses, and the Normans when they came to England carried the aulmoniere, a little purse for carrying alms for the poor, suspended The fashion of carryfrom the girdle. ing the purse in that way, but not for that purpose, has revived of late years. The general purse was of triangular form, frequently ornamented with beads or trimming and suspended from the girdle. Bankrupts figuratively gave up their effects to their creditors by putting off the girdle to which the in 1880. Increase during the last year purse and keys to their estate were at 4401, the largest in the history of the tached. So long as girdles were worn there was little need of a pocket, for custom and convenience made it a habit to thrust anything within the encircling

Population, Density of .- The greatest density of population in the world is in parts of New York City, where the rate is actually 185,000 to 243,000 people to the square mile. In 1875 the rate in six different wards was 160,000, 176,000, 195,000, 203,000, 208,000, and 243,000, against a greatest density in London of 176,000. In three wards two-thirds of their area were covered with tenements, and each tenement had an average of but 12 to 15 square yards, against 107 for the city at large. Less than thirty acres of the Fourth ward contained 17,611 people, at the unexampled rate of \$70,000 to the square mile, 290,000 with allowance for streets. At this average density, New York would have a population of 6.500,000. Sixteen families, or 80 persons, have been found in a single dwelling of 25 feet front.

The average density of population in the world is 28 to each square mile of land area. Europe has 82 to the mile, or one to about every 8 acres; while in Australia, Polynesia, and on some of our Indian reservations, there is scarcely more than one person to the square mile. Asia, 48; Africa, 174; North and South America together, 51. Were the whole earth as densely populated as Europe, it would contain 4,209,945.-

600 souls.

Post-offices.—The last annual report of the Post-office Department shows of removals of postmasters of all classes many names of Bible personages com-

spectors. In 1579 cases of change of name and site there were only 665 new appointments, in each of the 914 cases the incumbent being retained. In number of new offices for the fiscal year Pennsylvania leads with 250, Texas follows with 207, Virginia 200, Kentucky 199, Alabama 197, and Georgia 196. New Hampshire and Rhode Island had the smallest number of new offices, 9 The new State of Washington increased its offices by 132, Alaska by only 3. New offices in all the States and Territories are increasing rapidly. Whole number of post-offices July 1, 1890, 62,400, against 58,999 in 1889, 57, 376 in 1888, 55,157 in 1887, and 40,021 country. The increase during 1888 was 1623.

The New York Post-office is the largest business establishment, and concerns the largest number of people, of any in the Union. It handles annually about 400,000,000 letters, papers, etc., or about six times as many as the entire population of the country numbers. Its yearly money-order business is not less than \$85,000,000 and its own receipts \$5,000,000, of which \$3,250,000 are net profit to the Government.

Pulse.—Experts say the normal rates are about as follow: In the new-born infant, 130 to 140 per minute; during first year, 115-130; second, 100-115; third, 95-105; seventh to fourteenth, 80-90; fourteenth to twenty-first, 75-85; twenty-first to sixtieth, 70-75; in old age, 75-80.

Puzzles and Games. — Buzz: This game often makes much sport. All who are to play are seated about the room, and commence by counting in two one two three, etc. When turn, one, two, three, etc. When seven is reached, or any number containing seven, or any multiple of seven, the word buzz must be substituted. Thus seven, fourteen, etc., would be Buzz, while seventeen would be onebuzz; twenty-seven, two-buzz; seventyone, Buzz one; seventy-seven, Buzzbuzz, etc. Any player who fails to respond promptly and properly is dropped, and the game goes on with those remaining.

A SUNDAY PASTIME FOR CHILDREN: Give each child a pencil and sheet of paper; appoint a time-keeper, and when he calls "time" each one is to write as

mencing with A as possible, as Abel, and leave an important part of a print-Aaron, etc. At the end of one minute ing establishment. time will be called again, and the PIED CITIES: time will be called again, and the writing must instantly cease. Then each will read his list, getting credit for each correct name, and forfeiting two for each one found to be incorrect. Then take up the next letter of the alphabet, and so on. An hour may thus be profitably spent, and no little knowledge will be obtained.

A RHYMING GAME: The following illustrates this game: "I have a word in mind that rhymes with eye," begins in mind that rhymcs with eye," begins the leader. "Is it a kind of grain?" asks one. "No; it is not rye." "Is it a word often used by an inquiring child?" "No; it is not why." "Is it a word sometimes applied to a horse?" "No; it is not nigh." "Is your word an answer?" "No; it is not a reply." "Is it something on the dinner-table on Thanksgiving day and Christmas? "Strange to say, I am not thinking of pie." "Is it something that we can see everywhere?" "It is the sky."

GUESS MY THOUGHT: I have in mind a little creature called by some an insect. It is of various sizes and colors. In some countries it is very poisonous. There are kinds that live under the water. Very small ones are injurious to plants. They have many eyes and four times as many legs as a bird has. Usually they eat small insects, but occasionally a wife eats her husband. They do not sing, but they prey. By this time, some one has found out what my thought is, and suggests that "It is a weaver by trade," or asks if it is not a

spider. DECAPITATIONS: Behead a color, and leave a beam of light; a small wood. and leave to wander about; a powerful motive agent, and leave what moves an ordinary vehicle; a gay assembly, and leave the whole; an implement used in war, and leave the sign of an idea; a period of time, and leave a part of the head; something that we eat every day, and leave something that we do every day; a pronoun that points out things at a distance, and leave a portion of everybody's dress; a deceiver, leave what is most to be desired when the thermometer goes below zero. Take the first two letters from a cup, and leave a very pretty name for a girl. Take away the equivalent of 500 from a word of two syllables meaning to wish, and leave a quaint term for father.

CITIES: Ogiacgh, Sotnob, Alhipleadiph, Madene, Singhownat, Rapsi, Oon Royk, Asggwol, Vlirelopo. Mneacsarot, Oonld, Udnibl,

PIED MICHIGAN TOWNS: Kacancim. Lacdrowet, Methusec, Yobnegach, Saleceh, Roac, Bolina, Naglins, Sankjoc, Phutmoyl, Tyonawted, Wicagoda.

## RHYMED ENIGMA.

I'm a city found in Northern Spain; I'm a city, too, in Michigan; Of syllables three, my number two Is just what a boy delights to do; My first you 'll see in a business way On street signs wheresoe'er you stray; Reverse my third, - the act will bring A word not worth the mentioning.

GEOGRAPHICAL QUESTIONS.

What has a mouth, but can not bite? What has an arm, but can not write? What has a foot, but can not walk? What has a head, but can not talk? What has a bank with no money in? What has a top that can not spin? What has a neck, but has no head? What never sleeps, but has a bed? What hook will never catch a fish? What hook win lever catch a lish?
Where are the locks keys do not turn?
Where are the capes that are not worn?
What has a branch, but has some keys?
What has no locks, but has some keys?
What is the ball that no one catches?
What is units long, but sis no scratches?
What is outselong, but is not tall? What is quite long, but is not tall?
What has a base, but plays no ball?
What are the poles that nobody climbs? Where are the boys to answer these rhymes?

## WHY IS A MAN LIKE OLD SHOES?

How much a man is like old shoes! For instance, both a sole may lose; Both have been tanned, both are made tight By cobblers. Both get left and right, Both need a mate to be complete, And both are made to go on feet. And both are made to go on feet. They both need healing, oft and sold, and both in time all turn to mold. With shoes the last is first; with men The first shall be last, and when The shoes wear out, they 're mended new; When men wear out they 're men dead too. They both are trod upon; and both Will tread on others, nothing loath. Both have their ties, and both incline, When polished, in the world to shine; And both peg out—and would you choose To be a man, or be his shoes? To be a man, or be his shoes?

CURIOSITIES OF THE ALPHABET: B makes road broad, turns the ear to bear. and Tom into tomb. C makes limb climb, hanged changed, a lever clever. and transports lover to clover. D turns bear to beard, a crow to crowd, and makes anger danger. F turns the lower regions to flower regions. G changes a son to a song and makes one gone changes eight to height. K makes now know and eyed keyed. L transforms pear into pearl. N turns a line into Take away the equivalent of ten from linen, a crow to a crown, and makes a word of two syllables meaning to say, one none. P metamorphoses lumber into plumber. S turns even into seven, makes have shave and word sword, a pear a spear, makes slaughter laughter, and curiously changes "having a hoe" to "shaving a shoe." makes bough bought, turns here there, alters one to tone, changes ether to tether, and transforms the phrase "allow his own," to "tallow this town." W does well; e. g., hose are whose, are becomes ware, on won, omen women, so sow, vie view; it makes an arm warm, and turns a hat into-what? turns fur to fury, a man to many, to to toy, rub to ruby, ours yours, a lad to a

lady.

Kaces of Mankind.—M. de Quatrefages, the eminent French ethnologist, estimates no fewer than 72 distinct races in the human species, all from three fundamental types, black, yellow, and white, which had their origin at the great central mass of Northern Asia, the cradle of mankind, where representatives of the types and races are still to be found. The whites appear to have originated on the west of the central mass, yellows on the north, and blacks on the south. The first extended westward and northward, giving birth to three secondary types, the Finnish, Semitic, and Aryan, except the Allophyles, a separate group. Their area of distribution is continuous, as is that of the yellows. from the extensive landsurface of the Eurasian continent. The latter spread eastward and crossed into America. Whites and yellows checked or blended with each other, producing many varieties. The black or negro type, originating on the south of the central mass, was forced by the nature of the continent, and probably by the attacks of whites and yellows, to go south into Africa and east into the Indian Archipelago or Melanesia. proto-Semites arrested their distribution in the north of Africa, and the mixture of the two races gave rise to the negroid populations. In the center and south of Africa the blacks continued in their ethnic purity until the infiltration of other races from Europe and the north of Africa in modern times. Those remaining in their original home became blended with whites and yellows, giving rise to the Dravidian populations, which pass by shades into the three fundamental types. The Allophyles, represented by the race of Cro-Magnon, occupied parts of Europe and North Africa, and extended to the Canaries. The three fundamental types are also Snowfall is included, figured in inches

found in Oceanica, Allophylfan whites Polynesia, blacks Melanesia, yellows Malaysia. The peopling of America dates from the quaternary period, and is due to migrations of different types, Allophylic white and yellow blending with the local quaternary races, which also belonged to the yellow type. Europe since the tertiary ages has received only Allophylian whites, Finns, and Aryans. The number of races now existing in a pure state is exceedingly restricted, if indeed there is a singe one which can be accepted as such.

Railroads.—Only about 5000 miles of new railway were constructed in this country in 1889, the smallest number of any year since 1885. None were reported from Vermont, Rhode Island, Nevada, Arizona, and New Mexico. Sixteen States had 100-200, Mississippi 212, Texas 270, North Carolina 279, Georgia 315, Washington 353, Mexico 369, Canada 733. January to July inclusive, 1890, 352 miles of new track were laid in the Northwestern States, 876 were under construction, 2196 under survey, and 4854 projected. timated strength of organizations of railway employees is: Brotherhood of Locomotive Engineers, 20,000; of Locomo tive Firemen, 18,000; of Trainmen, 16,000; of Conductors, 2000; Switchmen's Mutual Aid Association, 6000. last four, numbering 42,000, are feder-The following dates are said to be authentic for the introduction of steam railways in different parts of the world: England, Sept. 27, 1825; Austria, Sept. 30, 1828; France, Oct. 1, 1828; United States, Dec. 28, 1829; Belgium, May 3, 1835; Germany, Dec. 7, 1835; Cuba, 1837; Russia, April 4, 1838; Italy, Sept., 1839; Switzerland, July 15, 1844; Jamaica, Nov. 21, 1845; Spain, Oct. 24, 1848; Canada, May, 1850; Mexico, 1850; Peru, 1850; Sweden, 1851; Chili, Jan., 1852; East Indies, April 18, 1853; Norway, July, 1853; Portugal, 1854; Brazil, April 30, 1854; Victoria, Sept. 14, 1854; Colombia, Jan. 28, 1855; New South Wales, Sept. 25, 1855; Egypt, Jan., 1856; Middle Australia, April 21, 1856; Natal, June 26, 1860; Turkey, Oct. 4, 1860; Japan, 1872; China, 1876; Central Asia, 1885.

Rainfalls, Average Annual.—On the equator, 100 inches; 20th parallel, 80; 40th, 40; 50th, 30; 70th, 10; 80th, 5; Siberia, 10; Russia, 14; Germany 20; British Isles, 32; United States, 39. of water. The latest investigations into the influence of forests on rainfall are not favorable to the theory that their presence or absence materially affects the yearly average.

Recipes.—An Expensive but De-LICIOUS CORN-BREAD.—Mix thoroughly in a sieve, and then rub through it a pint of white meal, a pint of flour, two heaping tablespoonfuls of sugar, one teaspoonful of salt, and two of baking powder. Beat five eggs till very light, and add to them a scaut pint and a half of milk. Stir this liquid mixture into the dry one, and add a quarter of a cup of melted butter. Pour into shallow tins, make about one inch deep, and bake in a moderate oven for half an hour.—Maria Parlag.

WHOLE-WHEAT MUFFINS.—Dissolve one-half cake compressed yeast in one-half pint of milk, and add milk to make a pint. Stir into this three cups of whole-wheat flour, and set in a warm place to rise. When light add two well-beaten eggs, and pour the mixture into gem-irons, filling only half-full. When very light, bake in a quick oven. Two tablespoons of sugar and Zante currants may be added when light.

Good Corn Muffins.—Mix together in a sieve and rub through it a teacupful of cornmeal, twice as much wheat flour, one-third cupful of sugar, one teaspoonful of salt, and three teaspoonfuls of baking powder. Place a cup with two tablespoonfuls of butter in it in a basin of hot water, beat three eggs very light, add a large cupful of milk and pour over the flour, etc., beating all the while. Stir in last the butter, and bake twenty minutes.—Maria Parloa.

Tomato Soup.—Materials, one pint of well-cooked tomatoes, free from lumps and part if not all of the seeds, one pint of rich milk, one pint of water, an even teaspoonful of soda, and a little salt, pepper, and butter. Bring the water and tomatoes to a boil, and add the soda; then have the milk warm, add it to the mixture, and bring once more to the boiling point. Put in the salt, pepper, and butter, and serve immediately.

CREAM PEA SOUP.—If dried peas are used, put three-fourths of a pint to soak over night in a quart of water; in the morning drain and put to cook in cold water; skim when the water boils, cover closely, and simmer four or five hours. When the peas are tender, rub through

a colander to remove the skins. peas are very dry, add a little water to facilitate the sifting. While the peas are cooking cut in thin slices enough potatoes to make about one and a half pints, and put to cook in a small amount of cold water. When done put also through a colander and add to the With this put enough sifted peas. water or milk-the latter preferred-to make nearly or quite two quarts of Return the soup to the fire, havsoup. ing added a small head of ce ery cut into short lengths, and let all simmer together ten or fifteen minutes. Then, having removed the celery with a skimmer, pour in a cup of thin cream and salt to the taste.—Mrs. E. E. Kellogg. Battle Creek Sanitarium.

Brown Soup.—Simmer together one quart of sliced potatoes and about one-third the quantity of thin shavings from the top crust of a whole-wheat loaf of bread in two quarts of water; when the potatoes are tender mash all through a colander; add a cup of well-cooked and sifted tomatoes and a little salt, and return to the fire. When hot, add half a cup of cream and serve immediately.—Mrs. E. E. Kellogg, Battle Ureek Sanitarium.

Baked Eggs.—Here is a new way of cooking eggs, which we have seldom seen in print: For a family of four take about six eggs; break with care, separating the whites from the yolks; beat the whites as if for frosting, and pour into a shallow dish, one that will do for the table and at the same time is not too good to be put into the oven for the baking. Now pour on the whites, here and there, a tablespoonful of sweet cream; each tablespoonful will make a little opening where one of the yolks must go. Put a yolk in the place without breaking it, and set the dish in the oven for baking; salt and pepper can be mixed with the beaten whites, or salt alone, and put the pepper on each yolk. When done it should be slightly brown. The tastes of consumers must decide how hard or soft the yolks must be.

POACHED EGGS.—Break your eggs into a teacup previously well buttered; stand the cup in a frying-pan of boiling water up to the middle; as soon as the white hardens it is done; put a knife gently around the edge and slip the egg onto a plate.

PICKLED Eggs for the table can be made to look beautiful by the following process: Boil the eggs hard, and then

drop them into cold water and remove their shells. Boil dark-red beets tender enough to jam, and cover them with cold vinegar, spiced with cloves, etc., salted and peppered. Pour this over the eggs, and in two or three days they will be of fine color.

SCALLOPED EGGS.—Chop cold meat of almost any kind till it is fine, and mix with bread crumbs, pepper, salt, melted butter, and a little parsley; then moisten milk to a soft paste; fill pattypans or small tin basins with the mixture, and break an egg on the top of each; dust with pepper and salt, sift fine cracker crumbs over all, and place in the oven until the eggs are well set, perhaps seven or eight minutes. Bring to the table in the dishes in which they have been baked.

DROPPED Eggs.—Into a quart of boiling water put one tablespoonful of A shallow iron frying-pan is the best dish to be used. Break the eggs one at a time into a saucer, and slide it into the wa er. Keep the water boiling if possible, and as soon as the white is firm lift the egg out with a griddle-Have a slice of bread cake turner. nicely toasted and buttered. Turning the slice around with the edge or crust just dipping into hot water, softens it sufficiently. Be sure to have a warm plate, fresh eggs, hot water, good butter, a little of which with a sprinkling of pepper must be put on the top of the egg; and a daintier dish for breakfast or supper can not be found.

JAM CAKE.—One cup of jam, currant, raspberry, or any other kind; one cup of sugar, one-fourth cup of butter, one and one-half cups of flour, three eggs, four tablespoonfuls of cream, one teaspoonful each of soda, Stir together cinnamon, and allspice. quickly, putting in the cream and soda last. If the jam is not thick, more flour may be needed. Bake in a loaf or in layers; if the latter plan is followed, put together with frosting made of one egg and one cup of powdered Boil sugar to a syrup, pour it over the beaten egg, and beat again thoroughly.

GOOD FRIED CAKES.—One cup of thick sour cream, two cups of buttermilk, and two cups of sugar; add two even teaspoonfuls of soda, a little salt, cinnamon, or nutmeg, if desired by the eaters; stir quite soft, and fry with care, quickly. Sifted sugar

put on while the cakes are hot. Drain them, and let them cool before putting finally away.

OLD-FASHIONED LOAF CAKE.—Two cups of sugar, one cup of sweet milk, one half cup of butter, three eggs, three cups of flour, one teaspoonful of soda, and two of cream of Sift the cream of tartar and flour together, and add the soda to the milk.

PLAIN COOKIES.—Two eggs, cups of sugar, one cup of sour milk. three-fourths of a cup of butter, an even teaspoonful of soda, and flavoring if desired. Mix very soft, and roll thin.

A GOOD THICK COOKEY.—One cup of sour cream, one and one half cups of sugar, one egg, butter the size of an egg, a scant teaspoonful of soda, and flavoring to suit the taste. Mix very soft, and roll not very thin.

BAKED RICE PUDDING.—After washing a cupful of rice in three waters. put it into a dish that will hold two quarts and a half, and stir into it a teaspoonful of salt and one of cinnamon; then add three pints of milk and four tablespoonfuls of sugar. Bake slowly for two hours, stirring four times in At the end of the two that period. hours, add another quart of cold milk. Stir the pudding well, and bake an hour longer. Three tablespoonfuls of seeded raisins are an addition for many.

Boiled Bread Pudding.—Let one pint and a half of milk come to a boil, and pour it over three quarters of a pint of fine bread crumbs. While this is cooling beat four eggs very light, add sugar to your taste, with a third of a cup of butter, a teacupful of currants, cherries, or raisins, and half a teaspoonful of grated nutmeg; then when the milk has ceased to be scalding add these to it, beat well together, and put it into a buttered tin pail, tie a cloth over the top, set it in a kettle of boiling water, and let it boil for an hour and a half. Have the tea-kettle on the stove, so that the water can be replenished, and the boiling of the pudding not for a moment suspended.

APPLE PUDDING.—A delicious pudding made of grated apples is especially enjoyed if the apples are tart and of Grate the apples after good flavor. peeling them, weigh them after grating, and put with them an equal quan-To about ten tity of white sugar. ounces of apples and sugar allow four makes them a trifle nicer, and may be well-beaten eggs, the rind of one lemon,

and the juice of two. pudding dish with biscuit crust or piepaste, put in the apples, etc., and bake for half an hour in a hot oven. sauce of cream adds a touch of unequaled goodness; but it is very nice without.

NICE APPLE PIE.—One cup grated or stewed sour apples, one cup sugar, and yolk of one egg. Bake with an under-crust and frost with boiled frosting of white of an egg and one-half cup of sugar.

PUMPKIN PIES.—Cut a solid pumpkin into quarters, remove all the seeds, and bake until soft. Pumpkin is much sweeter baked than stewed, and When done scrape out not so watery. all the meat and rub through a colander; to every quart of pumpkin put a quart of rich milk and a cup of rich sweet cream, two tablespoonfuls of molasses, and sugar to sweeten to your Mix in a teaspoonful of salt, half a teaspoonful of cinnamon, one teaspoonful of nutmeg, two teaspoonfuls of ginger, and the yolks of three Beat all well towell beaten eggs. gether, leaving no lumps of spice, and lastly add the whites of the three eggs beaten very stiff. Line a deep plate with rich paste, wet the edge, and lay two strips of the paste around; then fill with the pumpkin and bake till you can put a knife-blade in the center without its running.

SQUASH PIES.—Use two cups of squash, boiling hot (if the squash is cold it must be steamed till hot enough), and two cups of boiling milk. Stir well, and cool. Add a cup of cold milk, or one half cup each of milk and cream, two eggs well beaten, sugar and salt to taste, and a little cinnamon. Bake with a rich under crust. This quantity makes two pies.

FRUIT-JUICES FOR THE SICK (or the well).-Express the juice from the ielly; fruit as if for then heat, adding a cup of sugar to three pints of juice. Can, and keep as you Raspberry, strawberry, do your fruit. grape, cherry, current, or even peach or plum juice, is excellent. With cold water, about equal parts, a very pleasant and harmless drink is prepared. These juices serve also as sour sauces for many sweet desserts.

ICE CREAM.—Three pints of cream, two of milk, one of sugar, two beaten

Line a shahow or other flavoring. Mix and freeze without cooking.

> FROSTED FRUIT.—Prepare a mixture of the frothed white of an egg and a little cold water. Dip carefully bunches of currants, cherries, grapes, or even as large fruits as plums, apricots, peaches, into the mixture; drain nearly dry, and roll lightly in powdered sugar. Place on white paper to dry.

Good TEA.—In making tea the pot should be earthen, rinsed with boiling water, and left to stand a few moments on the stove to dry. Put in the tealeaves, and let the pot stand a few moments longer. Pour on boiling water, leaving the pot standing where it will be at the boiling point, yet will not boil for from three to five minutes. For moderate strength use a teaspoonful of tea to half a pint of water. A good mixture of tea is made of equal parts of Oolong and Young Hyson.

Registration Laws. — Twenty-two States require general registration of voters; fourteen have only special laws applying to cities or smaller communi-

Religions.—The chief religions of the world may be classified by number of adherents about as follow: Christian-450,000,000; Confucianism, 390,-000,000; Hinduism, 190,000,000; Mohammedanism, 180,000,000; Fetichism, 150,000,000; Buddhism, 100,000,000; Spirit-worship, 50,000,000; Shintoism, 22,000,000; Jews, 8,000,000; Parsees, 1,000.000. Total, 1,541,000,000.

Revolution, Patriot-troops in American.—Massachusetts, 169 per 1000 of Connecticut, 134; New 88; Rhode Island, 85; population; Hampshire, 88; Pennsylvania, 59; New Jersey, 58; New York, 52; Maryland, 43; Delaware, 40; Virginia, 38; South Carolina, 25; North Carolina, 18. The low ratios of Southern States were due partly to; their large populations of slaves, and better ratios appear on the 1000 of; white population (of 1790)—Maryland 67, Virginia 61, Delaware 51, South Carolina 50, North Carolina 31.

Rings.—The memory-ring is merely a silver ten-cent piece rimmed out, with the milled edges left untouched. ally it has a bangle attached, made of the inner part of the dime and bearing the monogram of the youth who has been inveigled into giving the girl the When finished it costs less than coin. eggs, and three teaspoonfuls of vanilla \$1. Sometimes it is made double, the two dimes being cemented together. For the friendship ring, a girl goes among the young men of her acquaintance and gets from each a little sum, a cent to a dime; and when she has laid tribute on all her friends, she buys a ring such as the proceeds of her work will purchase. Or she limits all contributions to a single penny, and stops when she gets an even hundred.

Rivers, the Longest. — Mississippi, 4300 miles; Nile, 4100; Amazon, 3750; Yenesei, 3400; Yang-tse-kiang, 3300; Niger, 3000.

R's, the Three.—The origin of these is believed to be in the following queer old-time hand-bill, issued near Lancaster, Eng.:

James Williams, parish clerk, saxtone, town crier, and bellman, makes and sells all sorts of haberdasheries, groceries, &c, likewise hair and wigs drest and cut on the shortest notice. N. B.—I keeps an evening school, where I teach at humble rates reading, riting, and rithmetic, and singing. N. B.—I play the hooboy occasionally, if wanted. N. B.—My shop is next door, where I bleed, draw teeth, and shoo horses, with the greatest scil. N. B.—Children taught to dance, if agreeable, at 6d. per week, by me, J. Williams, who buy and sell old iron and coats—boots and shoes cleaned and mended. N. B.—A hat and pr. of stockens to be cudgelled for, the best in 5, on Shrof Tushday. For particulars inquire within, or at the horse-shoe and bell, near the church on tother side the way. N. B.—Look over the dore for the sign of the 3 pidgeons. N. B.—I sells good ayle, and sometimes cyder. Lodgings for single men. N. B.—I teaches jografy, algebry, and them outlandish Kind of things. A ball on Wednesdays and Fridays.

St. Aloysius (Catholic) Church, No. 34 Washington ave., Detroit, dedicated 1873, has seating capacity of about 900:

value of property, including lot 120 by 100, about \$70,000. Membership, 250 families. Services Sunday at 8, 10:30 and 7:30, every day at The 8 а. м. Reverend Ernest Van Dyke, pastor, is a native of Detroit, born Jan. 29, 1845;



REV. E. VAN DYKE.

graduated and was medallist at Fordham, N. Y.; studied in Rome 1864-68, and was there ordained Priest 1868; served the church in Adrian three years, and St. Peter and St. Paul's, Detroit,

one year, and in 1873 was appointed to his present pastorate. Residence, 36 Washington ave.

St. Barnabas Church, Detroit, is among recent Episcopal foundations here, and occupies a neat frame chapel on Harper ave. Sunday morning services, and arrangements are making for evening services also. The Rev. Chas. A. Cary, Rector, was born in Buffalo, N. Y., March 21, 1843; ordained to the diaconate in Christ church, Detroit, May, 1874, and also to the priesthood June, 1875; was the first assistant minister ever serving that parish, subsequently ministered to several parishes in the South, and near the close of 1889 took charge of this church and of St. Stephen's church, Wyandotte.

St. James' Church, Episcopal, Seventh and Bagg sts., Detroit, was a mission of St. John's, begun 1869; present building erected 1876, brick, and cost about \$16,000. Communicants, 350; souls in parish, 750; Sunday-school, 300. Services Sunday 9:15 (communion), 10:30, and 7:30; Friday, 7:30; communion all holy days. Vested choir, in charge of Mr. S. T. Warner. The Rev. S. W. Frisbie, Rector, was graduated at Racine College, and Nashotah Theol. Sem., ordained by Bishop Kemper, and came to St. James' Feb. 1, 1880.

St. John's Church, P. E., Woodward ave. and High st., Detroit, built its stone chapel 1859, and its fine church the next year. Sittings, 1068 and 350. Rectory added 1860, and church-house 1889. Total value of property, \$175, Seats in church rented and free, 000. in chapel free. Rectorate vacant; Assistants, Rev. E. M. Jefferys, Rev. W. W. Wilson; St. Mary's mission, Antoine and Benton, Rev. Douglass Hooff. Communicants St. John's, 1053: St. Mary's, 163; total, 1221. Sunday-schools, 707 and 366; total, 1073. Parochial societies, 13 and 2. Sunday services: Communion 8 A. M. Nov. to May, 7:30 May to Nov., and 10:30 first Sunday in month; morning prayer and sermon, 10:30; evening at 7:30; Sunday-school and Bible-classes in parish building, 2:30. Week-day services. in chapel: Wednesday, service and l cture, 7:30; Friday, morning prayer and litany, 9; Holy days, communion 9, evening prayer 5. Reading-room in parish building open and free 7 to 10 every evening. Services at St. Mary's: Communion 2d Sunday of

month 10:30, and 4th Sunday 7:30 A. м.; morning prayer and sermon, 10:30; evening, 7:30; Wednesday evening, prayer and lecture, 7:30.

St. Matthew's P. E. Mission, Antoine and Elizabeth sts., organized as a Dio cesan Missionary Guild in 1880.

sermon by the Rev. Paul Zeigler, and faithful ministrations afterwards until Easter Sunday, 1890, when the Rev. Chas. H. Thompson, D. D., late of Vicksburg, Miss., began service as Sit-Rector.



REV. CHAS. H. THOMPSON.

tings in chapel, about 300; in guild-house, 75; value of church property, \$13,500; all seats free. Holy Communion every Sunday at 7 A. M.; services at 10:30 and 4; Sunday school, 2:30; evening prayer and lecture Wednesday, 7:45. Dr. Thomplecture Wednesday, 7:45. Dr. Thompson is a native of Pittsburg, graduate of Oberlin College and Theol. Sem., Presbyterian minister 12 years and D. D. by grace of Princeton College, or-dained Deacon in Episcopal Church, New Orleans, La., in 1877 and Priest 1879, called to St. Mary's Church, Vicksburg, early in 1889, and accepted call to St. Matthew's Jan., 1890, holding his first service with it April 6.

St. Paul's Church, P. E., Congress and Shelby sts., Detroit, organized Nov. 22, 1824; Aug., 1827, laid corner stone

at Woodward ave. and Congress st.: 1852 occupied 📓 present structure at Congress and Shelby. Seating capacity, 900; value of property, **\$**100,000; communicants 800. representi n g 555 families, Sunday.



REV. R. W. CLARK.

and 4. Rev. Rufus W. Clark, D. D., Rector; Rev. Warren Hastings, B. D., Dr. Clark was born May Assistant. 29, 1844, at Portsmouth, N. H.; was graduated at Williams College 1865, and General Theol. Sem. 1868; ordained same year by Bishop Clark of Rhode Island; became Rector of St. Paul's Sept. 1, 1877. Residence, 767 Woodward ave.

St. Paul's United Evangelical (German) Church, Seventeenth and Rose sts., Detroit, is a branch of St. John's U. E.

church. formerly o n Monroe ave.. n o w o n Russell st. Its house of worship was built 1872-73, and consecrated Feb. 16, 1874, seats 700; property value, **\$2**5,. 000; membership, 800. Sunday services 10:30 A. м. and 7:30



REV. J. G. HILDNER.

P. м., and Wednesday service 7:30 Р. м. Sunday-school at 9:00 A. M Rev. J. G. Hildner, pastor, was born Feb. 6, 1837, at Syra, in Greece; was ordained Aug. 7, 1859, at Mannheim, Germany, and took charge of St. Paul's Feb. 16, 1873. Resides at No. 380 Seventeenth st.

SS. Peter and Paul Church (R. C.), Jefferson ave., Detroit, is in charge of the Jesuit Fathers and connected with

Detroit College. Its corner stone was laid 1844 and it was used as cathedral until June, 1877. when it was transferred to the Fathers. Sittings, 1000; value of property, including pastoral residence, \$120,000;



REV. M. P. DOWLING.

spiritual care of 500 families, or about 2500 souls. Sunday services: Low school 600. Sunday services 9, 10:30, masses at 5, 6, 7, and 8:30 A. M., high mass with sermon at 10:30, vespers 2:15, baptisms 2:30, benediction and lecture 7:30; week day masses at 5, 5:30, 6, 6:30, 7, and 8:30 A. M. Rev. M. P. Dowling, pastor of the church and Rector of Detroit, College was born in Cincinnati June 14, 1851, entered the Society of Jesus 1869, studied at St. Xavier College, Cincinnati, Woodstock College, Md., St. Stanislaus Seminary, Florissant, Mo., and elsewhere; taught at St. Xavier, St. Louis University, and Detroit College; was President of Creighton College, Omaha, where he established an observatory and St. John's Collegiate church, of which he was made Rector in 1887; and became Rector here in March, 1889. Residence, Detroit College; accessible at all hours.

St. Stephen's Church (P. E.), St. Aubin and Mullett sts., occupies the former German Baptist church, which gets \$8000, and Dr. Gregg of Boston was purchased and enlarged in 1888. Seats, 350; value, \$8000; membership, 210. The parish was founded in 1869, the Rev. E. A. Lightner presenting the lot upon which its first church edifice was built, on Catherine st. Christ church assumed the care of the mission in 1883, after which it grew rapidly, and has lately become independent. now at Alpena, and his successor is the Rev. E. Collins, late of Bad Axe, Mich.

St. Vincent's Church (R. C.), Fourteenth ave., Detroit, was built in the middle 60's, and \$10 000 addition made

1888, St. Vin cent's School costing \$50, 000, being built the year before. The before. school had 16 teachers and 1050 pupil: last year: membershij of parish 4000 or 1050 fami lies; sitting in church 1200; value o property, 124,000



REV. JAS. G. DOHERTY.

\$ 1 2 4,000.

Mass on Sundays 6:30, 8:00, 9:15, and 10:30 A. M., baptism 2:00, Sunday-school 2:30, vespers 3:00; week-day mass, 6:30 and 8:00 A. M. Rev. Fr. James G. Doherty, pastor, was born in County Tyrone, Ireland, studied and was ordained Priest in All Hallows' able in the sick room. Get some clean,

Seminary, Dublin, June 26, 1876. came to Detroit same year and was Assistant Pastor at SS. Peter and Paul, then pastor at Brighton, Osceola, and Howell, came to St. Vincent's July 4, 1886. Residence, 280 Fourteenth ave.; calls at any time, but best at 9, 1, and 7 o'clock.

Salaries.—The presidents of the New York Central and the Canadian Pacific railways are each paid \$50,000 a year. as much as the President of the United No minister of the States receives. Gospel in this country is known to receive more than \$16,000 a year, and but one to have that,—Rev. Dr. W. M. Taylor, of New York. In the same denomination (Congregational), Drs. R. S. Storrs, Lyman Abbott, and A. J. F. Behrends, of Brooklyn, have each \$10,-000 a year. Dr. Gunsaulus of Chicago \$7000.

Salvation Army. — Reports to the Inter-State Congress of the Salvation Army, held in New York City last November, show that it then had 445 corps and outposts in the field in this country, employing about 1125 officers. During October, 1890, 1,071,000 persons attended its in door meetings alone. The Rev. John Munday, late Rector, is The value of property held by so large and active a body in the United States is only \$35,000, but the Army has a total property in all lands worth \$3, 250,060, more than half of it owned in Great Britain.

Sand-painting.—A Parisian artist displays wonderful skill in painting in sand. With plates of various colored sand before her, she takes the sand in her right hand and causes it to fall in beautiful designs upon a table. bunch of grapes is pictured with violet sand, a leaf with green, the stalk with brown, and relief and shadows by other sands, when the work is brushed away, and a bouquet of roses and other objects is represented with the same dexterity and delicacy. Lines are drawn by the stream of sand as distinct as though made with an artist's brush.

Sayings.—A correspondent gives another origin for the saying, "As dead as a door-nail" (see Year-book for 1890, page 42), as referring to the wooden peg put into base boards for the door to strike against when thrown open. He asks, "What could be deader than a door-nail thus pounded for years?"

Sand-bags .- The sand-bag is invalu-

fine sand, dry it thoroughly in a kettle on the stove, make a finnel bag about cor. Gilman st., near Grand River ave. eight inches square, fill it with dry sand, sew the opening carefully together, and cover the bag with cotton May 8, 1853, or linen. This prevents the sand from and in Sept, sifting out, and enables one to heat the 1855, bought bag quickly by placing it in the oven from First or on top of the stove. After once Pres. church using this you will never again attempt the building to warm the feet or hands of a sick person with a bottle of hot water or a The sand holds the heat a long time, and the bag can be tucked up to the back without hurting the invalid. It is a good plan to make two or three of them, and keep them on hand, ready for use at any time when needed.

Schmiedharnguss.—This formidable name is given to a new metal, composed shortly beof pig- and wrought-iron, aluminium, fore occupycopper, bronze alloy, and a flux. It is produced direct from the cupola without annealing, yet can be welded and hammered like iron or steel, and can be manufactured, it is claimed, at a less cost than malleable iron or steel castings. Marvelous properties are attributed to it, and at a test made in Louisville it is said to have endured a tensile strain of 168,000 pounds per square inch, which was the limit of the machine.

School Law.-Act No. 147 of the Michigan Legislature of 1889 provides for the adoption of free text-books by any school district in the State. districts, except in cities under special charter, are required at the first annual meeting after the passage of the act to authorize the district board to purchase and provide free text-books for the use of the pupils in the district. Further action may be taken on the question at any subsequent meeting. After a district has voted favorably on the adoption of the text-books, the board shall estimate and report for assessment the amount necessary to purchase books, and the board shall contract with some dealer or publisher of books to furnish the books used in the district. Officers refusing or neglecting to carry out the provisions of the law after it has been favorably voted on by the district, shall be guilty of misdemeanor, and may be punished by a fine or imprisonment, or both.

Sea-level, land areas below: Shore of Caspian Sea, 86; Sirrah, in Lybia, 123; Arroyo del Muerto, Cal., 230; Conchilla Valley, near Los Angeles, Cal., 273; Lake Asal. East Africa, 639; Dead Sea district, 1289,

Second - ave. Presbyterian Church, Detroit, was organized as a United

Pres. church occupied until recently at Lafayette ave. and Wayne st. The church became American Presbyteria n



REV. R. TURNBULL.

ing its fine new edifice, which dedicated April 14, 1889. Sittings, about 800; value, about \$60,000. Membership, 365. Sabbath services 10:30 and 7:30; Sabbath-school at noon; Y. P. S. C. E., 6:30; Young People's Society third Tuesday evening each month. Public cordially invited. Rev. Dr. Richard Turnbull, pastor, was born in Roxburghsline, Scotland, or-dained Nov. 18, 1867, began regular work with this church Oct. 1, 1878, and was installed Nov. 21, same year. Residence, 395 Second ave.

Second German M. E. Church, Detroit, was organized in 1857, and its present edifice erected one year later, east side of Sixteenth st., near Dalzell. Services Sundays at 10:30 and 7:30; Sundayschool at 9; Epworth League Tuesday, 7:45; prayer-meeting Thursday, 7:45. Membership, 225. In 1882 a mission chapel was erected on Thirty-second st., and a Sabbath school is maintained there every Sunday at 2:30. The present pastor, J. Kern, has served the church since Sept., 1887.

Sects.—There are 189 religious sects in the United States, and 185 in England.

Seed to the Acre.—Wheat 11 to 2 bushels; barley,  $1\frac{1}{2}-2\frac{1}{2}$ ; oats, 2-4; rye, 1-2; buckwheat,  $\frac{3}{4}-1\frac{1}{8}$ ; millet,  $1-1\frac{1}{2}$ ; corn,  $\frac{1}{4}$ -1; beans, 1-2; peas,  $2\frac{1}{4}$ -3 $\frac{1}{4}$ ; hemp, 1-1 $\frac{1}{4}$ ; flax,  $\frac{1}{4}$ -2; rice, 2- $2\frac{1}{3}$ ; broom corn, 1- $1\frac{1}{2}$ ; potatoes, 5-10; timothy, 12 to 24 quarts; mustard, 8-20; herd grass, 12-16; flat turnip, 2 to 3 lbs; red clover, 10-16; white clover, 3-4; blue grass, 10-15; orchard grass, 20-30; carrots, 4-5; parsnips, 6-8 asparagus seed, 1 oz. produces 1000 plants and requires a bed 12 ft. | square; asparagus roots, 1000 plants a bed 4 ft. wide and 225 ft. long; English dwarf beans, 1 quart plants from 100 to 150 ft. of row; French dwarf beans, 1 quart plants 250 to 350 ft. of row; beans, pole, large, 1 quart plants 100 hills; beans, pole, small, 1 quart plants 39 hills or 250 ft. of row; beets, 10 lbs. to the acre, 1 oz. plants 150 ft. of row; broccoli and kale, 1 oz. plants 2500 plants, and requires 40 square ft.; cabbage, early sorts same as broccoli, and require 60 ft.; cauliflower, same as cabbage; carrot, 1 oz. to 150 of row; celery, 1 oz. gives 7000 plants, and requires 8 ft.; cucumber, 1 oz. for 150 hills; cress, 1 oz. sows a bed 16 ft. square; egg plant, 1 oz. gives 2000 plants; endive, 1 oz. gives 3000 plants, and requires 80 ft.; leek, 1 oz. gives 2000 plants, and requires 60 ft.; lettuce, 1 oz. gives 7000 plants, and requires seed-bed of 120 ft.; melon, 1 oz. sows 120 hills; 1 oz. of nasturtium sows 25 ft. of row, of onion 200, okra 200, parsley 200, parsnip 250, pepper gives 2500 plants; 1 oz. of pumpkin to 150 hills, of radish to 100 ft. of row, salsify 50 ft., spinach 200 ft.; squash, 1 oz. to 75 hills; tomato, 1 oz. gives 2500 plants, requiring seed-bed of 80 ft.; turnip, 1 oz. to 2000 ft.; watermelon, 1 oz. to 50 hills.

Shiloh Baptist Church (colored), 302 Columbia st. east, Detroit; membership 27, Rev. L. Auger, late pastor, was born

at St. Pie, P. Q., Canada, June 30, 1827, of French parentage, was educated at GrandeLigne Mission, labored for three vears with Dr. Cote of that mission an d nine years elsewhere in Canada as missionary,



REV. L. AUGER.

also 18 years at Ste. Anne, Ill., and 5 years in Stryker, O., and came to Detroit April, 1883, where he has since been mainly engaged in city mission work. He recently resigned his pastorate, and was succeeded in Dec., 1890, by Rev. W. A. Meredith, of Gallipolis, O.

Ship Canal, the Nicaragua.—Work was formally begun upon this Oct. 22,

1889, and is in active progress. canal will cross Nicaragua from Greytown, on the Caribbean Sea, to Brito, at the mouth of the San Juan del Sur, on the Pacific, 169.8 miles, of which only 28.9 miles will be canal proper, Lake Nicaragua and other inland waters being utilized for the rest. Estimated \$64,000,000, including electric cost lights and railroads for transporting supplies; to be finished in 1895.

Ship Railway.—One is building in Nova Scotia, to connect Northumberland Strait with the Bay of Fundy, 14 miles long, to carry vessels without breaking cargo. The ship canal projected here two generations ago was found impracticable, from the violent high-tides in the Bay and consequent immense mud deposits. The Dominion Government gives liberal pecuniary aid.

Simpson M. E. Church, corner Grand River ave. and Sixth st., was built in 1868, seats 800, and is valued at \$50,000. Members hip

849, largest in Detroit Confere n c e . past In the four years it started three successful missions, one becoming the Arnold M. E. In church. ten years it has had over 600 conversions. Sun day services 10:30 and



REV. M. C. HAWKS.

7:30; general prayer meeting 7:30 Wednesday; young people's meeting 7:30 Friday. Everybody welcome to Pastor M. C. Hawks was born in all. Wheeling township, Cook Co., Ill., Aug. 18, 1851, entered ministry Sept., 1878, joined Detroit Conference 1879, and was appointed to this church Sept., 1887. Residence, 418 Sixth st.; can be seen Monday afternoons and other days 12 t > 2 and 5 to 7.

Snow-lines, Hight of.—In Greenland, 2300 feet above the sea; Alps, 9000; Caucasus, 11,000; Rocky Mountains, 14,000; Popocatapetl, 14,900; Himalayas, 17,000. The limit of perpetual snow on the equator is 15,207 feet; at 60° of latitude 3818, and 75° 1010.

Smith, Sergt. James P., winner of the DETROIT JOURNAL Marksmanship

Medal at the State Encampment in Bat-small pensions for disabled Confedertle Creek, Aug., 1890, is a member of Company D, Second Regiment, and resides in Three Rivers. He was born in Niagara Co., N. Y., July 19, 1846, came to Michigan in childhood with

his parents and settled in Branch county, where he r e mained until 1880, then removing to Three Rivers. He has been connected with the State militia about



eight years, always taking a lively interest in the improvement of markmanship; but that feature of the service having been neglected of late years, he has had but little rifle practice. He was in the company's rifle-team in 1884 and enjoyed one season's practice, his entire experience, except for about three weeks before the last Encamp-He is a machinist, and so expert with tools that he can make anything from a locomotive to a watch. He is now, however, keeping a variety store, and doing a thriving business. He has been married some 25 years, and two generations now pay him reverence, as the result of a happy union,

Soldiers' Home.—National soldiers' homes have been founded at Washington, D. C. (1851, for regulars); Central, Dayton, O.; Northwestern, Milwaukee, Wis.; Western, Leavenworth, Kan.; Pacific, Santa Monica, Cal.; Southern, Hampton, Va.; Eastern, Togus, Me.; that time, societies have been organ-and a new one at Marion, Ind. There ized in nearly every State of the Union. are State homes at Yountville, Cal.; Noroton, Conn.; Quincy, Ill.; Marshalltown, Io.; Chelsea, Mass.; G and Rapids, Mich.; Minnehaha Falls. Minn.; Grand Island, Neb.; Kearny, N. J.; Bath, N. Y.; Sandusky, O.; Erie, Pa.; Hot Springs, S. D.; Bennington, Vt.; and Waupaca, Wis. Con-Confederate soldiers' homes are supported. mostly by private contributions, at human anatomy. He says it "is the Richmond, Va.; Pikesville, Md.; New seat of the imperishable mind, and is Orleans, La.; and Austin, Tex.

ates.

Soldiers' Societies.—[For those in Michigan, see Appendix.]

Sons of the American Revolution — This organization, which admits to its membership any male descendant of

Revolutionary ancestry, has a national delegated organization, with Dr. William Seward Webb, of New York City, as president-general, and tributary. State societies, in each State. The officers of the Michigan society, organized January 18, 1890, are as follow:



President, Hon. H. B. Ledyard, Detroit; secretary, Mr. Frederick T. Sibley, Detroit; registrar, Silas Farmer, Detroit. The next meeting of the Michigan society will be in Detroit, Feb. 22, 1891. This patriotic organization began in California July 4, 1876, when a State society was effected. This was followed, on Dec. 4, 1883, by a State society in New York. Later still, organizations were created in New Jersey. Pennsylvania, and the District Columbia. Finally, on April 30, 1889, upon the occasion of the Washington Centennial Celebration in New York City, delegates and representatives from twelve States met at 9 A. M. at Fraunce's Tavern, where Washington made his farewell address, and effected a national organization, to be composed of delegates from all the States. Since that time, societies have been organ-The object of the society is purely patriotic and non-partisan. The accompanying illustration is that of the badge of the order.

Soul.—A Philadelphia doctor now locates the soul in the corpus callosum, a small spongy body at the base of the brain, which has defied the efforts of physicians to ascertain its uses in the Some the great reservoir and storehouse of of the Southern States have provided electricity, which is abstracted from

SOUND. the blood in the arteries, and conveyed through the nerves up the spinal cord to the corpus callosum."

Sound.—One of the most wonderful discoveries within the last year or two is that a beam of light produces sound. A beam of sunlight is thrown through a lens on a glass vessel containing lampblack, colored silk or worsted, or other substance, and a disk having slits or openings cut in it is make to revolve swiftly in the beam of light, so as to cut it up, thus making alternate flashes of light and shadow. On put. ting the ear to the glass strange sounds are heard, so long as the flashing beam is falling on the vessel. If the light be passed through a prism, no sound is heard. A green light thrown on red worsted produces the loudest sound.

Speed. — Two torpedo-boats have been built, one for the English, one for the Italian Government, that move with the amazing speed of 27 knots, or nearly 31 miles, per hour. This is the utmost that has been got out of wood (or any other material) on water.

Speed of Trains can be ascertained with reasonable nearness by counting the number of clicks in 20 seconds, each click indicating the passage over About 180 rails are laid to the mile, and  $\frac{1}{3}$  of a minute is 1-180 of an Hence, if 20 clicks are heard in 20 seconds, the train is traveling a little more than 20 miles an hour; if 25 are heard, 25 miles; and so on. Railroad men themselves use this rule.

Speed, Relative.—A German scientist has recently computed that a snail moves .0015 metre in a second; man walking, 1.25 metres; on snow-shoes, 2.95; as sprinter, 7.1; swiftest river, 4; balloon in calm, 6.4; fast steamboat, 8.5; fresh breeze, 10; torpedo-boat, 11.5; very fast skater, 11.6; running race-horse, 12.6; mountain torrent, 14.3; express train, 16.7; ocean wave, 21.8; carrier-pigeon, 27; swallow, 67; heavy cyclone, 116; sound, 337; equatorial point, 463; cannon-ball, 500. the same time the moon travels one kilometre: explosion of gun-cotton, 5.8: the sun, 7.6; Sirius, 15.4; earth 29.5; average shooting-star, 40; Hallev's comet near sun, 393; storm on sun, 402; cable current, 4000; telegraphic current, 11,690; induction current, 18,-400; light, 300,000; discharge of Leyden jar on copper wire 1.7 millimetre in diameter, 463,500.

Sporting. — [See Appendix for statistical tables.] The year which has closed will go down into sporting history as one of the most fruitful and startling ever known, and will be quoted as the year of strange happenings in all lines.

In the first place the national game, base ball, received a set-back such as never occurred before in its history. The National League had what at first sight seemed a dangerous enemy. sport languished, interest died out, and at the first blush the insurrectionists called the Brotherhood seemed to be on the top wave of popularity. The fight ended by the virtual surrender of the Brotherhood and the loss of big sums of money to all interested. The causes which led up to the revolt and the reasons why it failed are so many and apparent that they need not be given here. It was a year of fate for the game, which has grown and flourished since early in the 70's, and it is at this time doubtful if it recovers its old-time supremacy for a long time, if at all. John Ward, the leader of the revolt, made a name for himself out of it, but the players who enlisted under the banner he raised may, many of them, never regain lost ground. The move is everywhere admitted as ill-advised and harmful to the interests of the game.

Outside the disruption in the great League it was a bad year for the lesser Leagues, the International, of which Detroit was a member, having struggled for a living until July and then thrown up the sponge in disgust. The Michigan State League went the way of the International, and at the close of the year for the first time since 1881 there was neither League representative nor

interest in Michigan.

In turf circles the record has been one of wonder even to the old patrons. New horses have come to the front, and a surprising number of record-breaking performances on both the trotting and running track have been witnessed. The Detroit Driving Club, under President Campau, inaugurated the grand circuit season with purses that amounted to \$50,000, the largest ever offered, and the result was the fastest meeting ever held in Detroit. In almost every event the time was faster than any body expected. The sensational performance of the meeting was the exhibition mile of the California Filly Sunol, who made the half-mile in 1:02. Another record broken at this meeting

was in the amount of money offered, \$25,000 in purses and added money being paid in one day at the meeting, the largest sum ever given in one day at any trotting meeting. A week after the regular meeting the great match race between Jack, the handsome gray, and Palo Alto, the California marvel. occurred, and the time made was the fastest ever trotted in a race on any track. Jack lowered his record at the time, and Palo Alto although beaten made a great showing. On foreign fields the sensational performances have been so many and varied that room is not given for their consideration here; but full records will be found in the sporting appendix which was prepared especially for the Journal.

In no branch of sport have there been such great strides made as in amateur Under the fostering care athletics. of the Amateur Athletic Union of the United States clubs have sprung up everywhere, exhibitions have been attended by immense crowds, and the results of games and sports watched with interest. One of the greatest meetings ever held was that at Washington in October, where John Owen, jr., a member of the Detroit Athletic Club, won the honorable title champion 100-yard sprinter of the world, and Fred T. Ducharme showed his heels to the famous athletes of the country in the 120- and 220-yard hurdle contests, and became champion hurdler of In these contests the Detroit country. Athletic Club has played a very prominent part and justified the prediction made some years ago that it would become one of the leading clubs in the country. While in point of membership it has not surpassed the Eastern clubs, which admit anybody that will come,—the Detroit Athletic Club being very particular in the matter of electing new members,-it has become very widely known and was selected to hold the great contest of the West, a contest which was remarkable in many ways, but in which the records were not badly broken. John Owen, of all the the members of the club the most prominent, is practically a new man at athletics, and a few years ago was unknown. As early as last year he became famous for his work at the Traverse Island, N. Y., and at Toronto, and there were many who prophesied that he would yet beat the great record for the 100 yards, a prophecy which he has fulfilled.

John Owen, jr., amateur champion 100-yard runner of the world, Western champion 220 and 440-yard runner, champion of Canada for both 100 and 220 yards, and the holder of innumerable championship, medals is a native Detroiter, having been born in 1861 at No. 61 Fort street west, where he now resides with his parents.

personal appearance he is strong and active, standing 5 feet 81 inches tall and weighing 130 pounds. Until 1889 he had no idea of entering the athletic arena, but early in April that year began to train and surprised everybody by winning the 100yard handicap at the D. A. C. games in April. At the championship meeting which was held in Detroit in June he gave Carey a hard battle



in the 100 and 220, and made a great showing. A little later he had a walk-over in the Pittsburg handicap games, and then won every event in which he was entered at Chatham. August at the D. A. C. games he ran the 100 in 9\frac{4}{5} sec., but did not claim the record nor that of 21\frac{2}{5} for the 220, as a strong wind was blowing at the time. He first gained national note by his work at Traverse Island, N. Y., where he defeated Carey, Westing, Copeland, King, and other noted Eastern athletes, winning the 100-yard race in 10% on a very heavy track. He still further increased his fame at the same meeting by winning the 220 in 23t. He next ran second to Corcoran of New York, at Toronto, after the referee had cheated out of his chance by setting him back. At the Western championship meeting

the court of appeals, with original jurisdiction in certain cases; and is the court of last resort in this State.

Chief Justice John Wayne Champ-lin, of Grand Rapids, was born at Kingston, N. Y., in 1831, and has been

a resident of Michigan 36 His years. promine n ce as an attorney made him a frequent candidate of his party for judicial honors; he was Judge of the Recorder's Court of Grand Rapids in 1861, can-



didate for Cir- CHIEF JUSTICE J. W. CHAMP-LIN.

cuit Judge in 1863, and for Prosecuting Attorney of Kent county in 1864, was Mayor of Grand Rapids in 1867, and candidate for the same office again in 1868. was nominated for Justice of the Supreme Court by the Fusion party in 1883, and elected over Hon. Austin Blair, Republican, by a vote of 127,376 to 119,870; 13,467 votes were cast for John H. Tatem, Prohibitionist.

Justice Allen Benton Morse, of Ionia, was born in Otisco, Ienia Co., Mich., Jan. 7, 1839, and lived on a farm until

he was 19g years old. He attended the Agricultural College 1858-59, and was studying law in Ionia when the war broke out. He enlisted in the 16th Michigan Infantry, July 30, 1861, and served until Dec. 26, 1862.



JUSTICE A. B. MORSE.

as private and non-commissioned officer. He was promoted to the rank of First Lieutenant for bravery on the field, and lost his left arm while serving on Col. F. T. Sherman's staff at the battle of Mission

soonest expires is Chief Justice. It is resumed his studies and was admitted to the bar in 1865. He was a Republican until the Greeley campaign, when he supported the Democratic candidate. and has since acted with that party. In 1885 he was elected Justice over Thomas M. Cooley by a majority of nearly 30,000.

Justice Claudius B. Grant, of Detroit, was born at Lebanon, Me., Oct. 25, He came to Michigan at an early

age, and entered the University in 🖟 1855, graduating in 1859. At the call for troops he en troops he en listed with theTwentieth Michigan Infantry and served to the end of the war, leaving the service colonel of his regiment. On his return he



JUSTICE C. B. GRANT.

entered the University Law School, and was admitted to the bar June, 1866. His first public office was Recorder of Ann Arbor, since which time he has been Postmaster of that city, Member of the Legislature, Regent of the University, and Prosecuting Attorney of Houghton county, and was Judge of the Twenty-fifth (Marquette) Circuit when elected by the Republican party to fill his present position.

Justice Charles Dean Long, of Flint was born at Grand Blanc, Genesee Co., Mich., June 14, 1841, son of Peter

Long, who came Michigan from Massachusetts, and descendant of one of the oldest families of the Old Bay State. He prepared for the State University, t h e but breaking out of the war changed his plans, and he



JUSTICE C. D. LONG.

shouldered a musket and went to the Ridge. On his return from the war he front as a private in Company A, mington Island, and had to be returned home incapacitated for further service on account of wounds. After his return he took up the study of the law. Always a staunch Republican, he was elected by his party to numerous offices, and in 1885 was chosen as Department Commander of the G. A. R. for Michi-In 1887, when the Supreme Court was increased to five members, he was elected by 36,000 majority over Hon. Charles D. Camp, of Saginaw.

SUPREME COURT.

Justice Edward Cahill, of Lansing, appointed by Gov. Luce to fill the unexpired term of Hon. James V. Camp-

bell, of Detroit, deceased, was born in Kalamazoo 1843, studied in Kalam a zoo College, learned the printers' art, served as a private in the 89th Illinois Infantry and a captain in the First Michigan Colored



JUSTICE EDWARD CAHILL.

Troops, was admitted to the bar 1866, practiced in Ionia and Chicago, settled in Lansing 1873, was Prosecuting Attorney for Ingham Co. two terms, and Member of the State Board of Pardons. He will be succeeded on the Supreme

Bench Jan. 1, 1891, by Justice McGrath. Justice John Wesley McGrath, of Detroit, was born in Philadelphia Jan. 12, 1842, and came to Michigan

when but one year old. His early boyhood was spent in farm work, but in 1862 he entered Albion College, and two years later the University Law Ιn School. 1865 h e served in the Provost Maroffice shal's in Detroit



JUSTICE J. W. M'GRATH.

Eighth Michigan Infantry. He was under Gen. Flanagan, and left there twice wounded in the battle of Wil- a short time later to undertake mercantile business in Pennsylvania. He re-entered the Law School and after two years graduated and took up law practice in Detroit in 1868. was a Republican until 1878, when he went over to the Democratic party, with whom he has since affiliated. He organized the State Labor Bureau under Gov. Begole, and was Commissioner two years. He was a member of the Detroit Board of Education four years, and was City Counsellor at the time of his elevation to the Supreme Bench. His term of office expires Dec. 31, 1895.

Supreme Court, Federal.—The Justices of the United States Supreme Court, with their ages and dates of appointment, are as follow: Melville W. Fuller, 58, 1888; Stephen J. Field, 73, 1863; Joseph P. Bradley, 76, 1870; John M Harlan, 54, 1877; Horace Gray, 57, 1881; Sam'l Blatchford, 69, 1882; Lucius Q. C. Lamar, 64, 1888; and David J. Brewer, 53, 1889. There is one vacancy by death of Justice Miller, appointed 1862.

Switzerland, by recent census, contains 1,700,000 Protestants, 1,200,000 Roman Catholics, 8300 Jews, and 10,-700 non-religionists.

Tabernacie (formerly Lafayette-ave.) M. E. Church, Fourth and Howard sts., Detroit, was organized May 1, 1849,

sold its property 1873 and removed 🔀 to present [ site, where the church was dedicat ed 1874. Sittings about 900; value, **\$40,000**; membership, 360. All seats free; expenses met by week ly free will offerings.



REV. WM. DAWE.

Services on Sunday 10:30 and 7:30: S. S., 12: weekly prayer meeting Wednesday at 7:30; Epworth League Friday 7:30; class meetings Sunday morning and evening. Pastor Wm. Dawe, D. D., is a native of Cornwall, Eng., born March 5, 1848, began to preach 1869. came to this country April, 1871, graduated from Theol. Dep't N. W.

Univ. 1877, and received D. D. from reasonable duties upon any products of Albion College 1890. He joined Detroit Conference 1873, came to Tabernacle church 1880, and again 1886, meanwhile erecting and serving Palmer Memorial church four years. dence, 125 Howard.

Table, an Extemporized.— Bob Burdette's way of making a table in a hotel-room where there is none he describes as follows: "I take out a bureaudrawer, turn it upside down, push it back in place about two inches, and defying the landlord have a table it would break his heart to see."

Tariff of 1890.—This measure was passed by a Republican Congress, and signed by a Republican President, and thus embodies the Republican principle of protection to American industry. The tariff on sugar is reduced from 3 or 3½ cents to ½ cent per pound (some coarse grades free), but to offset this bounties of 13/4 to 2c. are paid on the home production of sugar. Coffee and tea are on the free list. Tobacco (leaf) pays \$2 to \$2.75, against 75c and \$1 Tobacco (leaf) before; cigars \$4.50 and 25% additional, against \$2.50 and 25% additional. tilled liquors pay \$2.50, against \$2; wines, 50c. to \$8 against 50c. to \$7; and malt liquors 20 to 40c., against 20 to 35c. Metals and manufactures of metal remain about the same, except tin plates, which rise from 1c. by the previous tariff, to 2.2c. now. Clothing is 50%, against 35%; cotton cloth, 2 to 50, against 20 to 5; dress goods (woolen), 7 to 8c. and 40%, against 5 to 7c. and 35 to 40%; jewelry, 50%, against 25%. Important changes are made in farm products: Wool 11 to 12c., against 10 to 12c.; butter 6 (formerly 4); cheese 6 (4); eggs free (5); milk 5 (10%); live poultry 3 (20%), dressed do. 5 (25%), beans 40 (10%), hay \$4 (\$2), potatoes 25 (15), hops 15 (8), cabbages 3 (10%), honey and maple syrup 20, onions and green peas 40, other vegetables 25%, wheat 25c., corn, oats, and buckwheat 15, barley 30, rye 10, rice 11 to 2c., garden seeds and nursery stock 20%, horses and mules \$30 or 30%, cattle \$2 to \$10, hogs \$1.50, sheep 75c. to \$1.50 or 20%, meats 2 to 5c. [See also Art-works.] Provision is Provision is favoring reciprocity of free trade between governments, by providing that the President may suspend the free list as to sugar, molasses, coffee, tea, and hides, against such exports from any country imposing what he considers reciprocally unequal and un- 150. The Temple, a substantial struc-

the United States, and he may require the payment of duties upon the articles specified.

Tarring and Feathering, instead of Resi | being a purely American barbarism, is now proven to be an old English custom, at least as old as the time of Richard the Lion heart. Setting out on one of his crusades, one of his enactments for the regulation of his fleet was that "a robber who shall be convicted of theft shall have his head cropped after the fashion of a champion, and boiling pitch shall be poured thereon, and the feathers of a cushion shall be shaken out on him, so that he may be known, and at the first land at which the ship shall touch he shall be set on shore." Whether the custom was earlier we have no means of determining; but it is at least hard upon 700 years old.

Taste. - Some very curious and careful experiments have determined the order of the effect of substances upon the organs of taste as follows: Bitters, acids, saline substances, sweets, alkalies. Except for salts, women have more delicate taste than men. Of 128 persons, men detected one part quinine in 390,-000 parts of water, women 1 in 456,000; sulphuric acid, men 1 in 2080, women 1 in 3280; cane-sugar, men 1 in 199, women 1 in 204; bicarbonate of soda, men 1 in 98, women 1 in 126; but common salt, men 1 in 2240, women 1 in 1980. Some tasters detected 1 part of quinine in 5,120,000 parts of water, while others failed to find 1 in 160,000.

Temple Beth El, Detroit, is one of the most prominent Jewish congregations in the country, having had amongst its

eminent Rabbis Rev. Liebman Adler, father of the architect of Chicago Auditorium, Rev. Dr. K. Kohler, now of the New York Temple Beth El, and Rev. Isidore Kalisch, of New York City. Member-



ship, active and contributing, about

ture at Washington ave. and Clifford | and Seminary 1879, ordained May 9, st., seats 1000; total property, \$75,000. Services Saturday at 16, Sunday at 11, all open to the public. Charitable and literary societies connected: Hebrew Relief, Literary, Ladies' Sewing, Hebrew Widows' and Orphans', Young Girls' Aid, Little Girls' Literary and Fair, Industrial School, Phœnix Club, Emerson Circle, Philosophical Club, English Lit rature Class, Boys' Own Club. Rabbi Louis Grossman, author of "Judaism and Science of Religion," "Maimonides," etc., b. Feb. 24, 1863, entered the ministry Dec., 1884, at Hebrew Union College, Cincinnati, Ohio, and took his present position at once. Residence, 63 Henry st.; reception evening, Friday.

Telegraph.—A new system has a sending instrument with ten keys, each making one of the straight or curved lines used in the common alphabet. is claimed to have sent a 76-word message in 25 seconds, and printed it in plain Roman characters. Over 1200 miles of telegraph wire are said to be strung overhead in New York City.

Telephones, Long-distance.—A line is successfully operated from Erie, Pa., to New York City, 500 miles; and it is said a successful test has recently been made of a telephone line from St. Petersburg to Boulogne, 2465 miles.

Third ave. Presbyterian Church, near Alexandrine ave., Detroit, is an outgrowth of a mission Sunday-school

started in 1867, upon a pecuniary foundation supplied by the late F. J. B. Crane. The original building, much improved, is yet in use. The civil organization was effected July 21, 1886, the e c clesiastical Nov. 11, with



REV. J. M. BARKLEY.

21 members, to which 242 have since been added. Present membership, 232. A new \$15,000 chapel and Sunday-school rooms will go up this year. Pastor James M. Barkley was born near States-Nov. 22, 1846, and N. C., graduated at Princeton College 1876 | sion, cor. Dubois and Medbury sts., was

1879, called to this church Nov. 11, 1886, and installed May 23, 1887. Residence, 759 Second ave.

Thompson Presbyterian Church, at Woodward and Hendrie aves., Detroit, organized 1885 as Congregational, as

now Feb. 9, 1889. Chapel completed Feb. 16, 1890; sittings, 500; value with lot, \$27,500; membership, 145. Sunday service 10:30 and 7:30, S. S. 12. Midweek service Wednesd a y eve. All seats free; public cordially in-



vited. Rev. REV. H. P. WELTON. H. P. Welton, D. D., pastor, was born in Ohio 1838, entered ministry 1868, took this pastorate Feb., 1889. dence, 24 Medbury ave.; study in chapel.

Trinity Congregation, German Evangelical Lutheran Church, Gratiot ave. and Rivard st., Detroit, removed to its

present brick structure 1865, from its frame house of worship on Larned st. Sittings, about 800; property value, \$25,-000: niembership, about 300 families. Sunday services 10. and 2:30 and 7:30 altern a t e l y. Rev. John A.



REV. J. A. HUEGLI.

Huegli, pastor, was born in Bavaria January, 1831, came to America 1842, prepared at Concordia College, St. Louis, and was ordained at Jonesboro, Ill., 1856, and installed as pastor Trinity Congregation Jan., 1860. With one exception, he is probably the oldest pastor in the city by continuous service. Residence in parsonage, 377 Gratiot ave.

Rev. F. Hahn, pastor of Trinity mis-

born Jan. 1, 1865, at Hillsdale, Mich., |

was pastor at Otis. Kansas. and came to mission March 5. 1889. The chapel and parsonage property here are worth \$2400; sittings in the former, 250; membership, 43. Mr. Hahn also has charge of the English



REV. F. HAHN.

Lutheran mission on Russell st. Residence, 1272 Dubois st.

Trumbull-ave. Congregational Church. corner Seventh st., was originally the Sixth-avenue Mission, organized 1868, and removed to its present quarters 1881, under auspices of the First church. The society was organized April 27, 1881, with 69 members. Value of church property, \$12,000; membership, 243. All seats free; voluntary offerings support church. Sabbath services 10:30 and 7:30 (7:45 in summer), Sunday-school 2:30. Lord's supper at 12 first Sunday each month; conference and prayer-meeting, Wednesday, 7:45. The church is just now pastorless.

Trumbull-ave. Presbyterian Church. Detroit, was colonized from the Fort-st. church, organized 1881 with about 40 members, and is now probably the largest church of the faith in Michigan, with one exception. Membership, 625; Sunday-schools, including mission, 900 Eminently a young people's church. House of worship dedicated Feb., 1888, costing about \$40,000; sittings, main room 800, chapel 450. Galleries now going in former will increase Pastor R J. Service was born to 1250. in Ireland Sept. 20, 1856, entered the ministry Oct., 1883, and assumed the pastorate of this church March 4, 1888.

Trusts.—The great monopolies of this country known as "trus's" are the Standard Oil Trust, organized as such in 1882, and by the latter part of 1888, according to the report of a legislative committee, controlling properties worth \$148,000,000; the Sugar Trust, formed Oct., 1887, with \$45,000,000 capital; the Cotton-seed Oil Trust, embracing about 70 mills and refineries in various States; and a Milk Trust, with head- of worship,

quarters in New York. There are many others, covering rubber goods, oil-cloths, envelopes, meats, glass, furniture, elevators, etc.

Tunnel, St. Clair.—The tunnel completed last summer by the Grand Trunk Railway between Port Huron, Mich., and Sarnia, Ont., under the St. Clair River, is 2267 yards long-777 under land on the American side, 770 under the river, and 720 under land on the Caradian side. Length of ascent on American side, 1633 yards; on Cana-dian,1657. Minimum depth below bed of river, 15 feet; maximum below surface of water, 66½; clear internal diameter, 20, containing one track; lining, cast iron; cost, about \$2,500,000. Several great decapod or ten-wheeled locomotives, weighing 90 tons apiece, are con-

structing for service in the tunnel. Tunnel under Detroit River.—The Detroit Railroad & Tunnel Company has been formed, with \$1,500,000 capital, to construct a tunnel under the Detroit River at Detroit, and operate therein railroad tracks and switches. The corporators are Luther Beecher (11,955 shares), Mary W. Beecher (1000), Gen. L. S. Trowbridge, Collins A. Clark, Fred A. Baker, and Jonathan Ormerod (10 each), A. McClellan, and L. W. Hallock (1\_each), all of Detroit; and George L. Beecher of Negaunee (2000 shares). It is expected that ground will be broken for it, if at all, on this side at Fort st., near Eleventh. A Canadian company is understood to be promised, to build a tunnel to the international boundary under the river, where it will meet the work of the Detroit company.

Twelfth-st. Baptist Church, Twelfth and Linden sts., Detroit, is the growth from a mission of the First church,

and was organized in 1874. Rе ported 331 members at last meeting of Associa tion; Sunday school 421 en rolled, aver age attend ance 288. Sus tains the West Baptis and Kirby st missions Present house



REV. W. H. STEDMAN.

formerly occupied by the Park Place of the veteran missionary, Rev. Abel church, seats 400. Site has been pur Bingham; was a Union soldier 1861-65; chased at Grand River ave., Brigham and Thirteenth sts., for \$4000. Pastor W. H. Stedman, D. D., born near Towanda, Pa., Aug. 12, 1840, spent his boyhood in Cincinnati and Southern Illinois, graduated at Shurtleff College 1869, was ordained in August over the church he organized while still a student, at Shelbyville, Ill., was afterwards pastor at Urbana and Mendota, Ill., and came to his Detroit pastorate Jan. 1, 1887. Received D. D. from Shurtleff Resides 763 Wabash ave.; calls any secular forenoon but Monday and Saturday.

Union, the Industrial.—An important movement was set on foot Nov. 29, 1890, at a meeting in Lansing called by a joint committee of the Patrons and the Farmers' Alliance of Ingham Eaton counties, in the hope of a better understanding and more fraternal feeling among all labor organizations of the State. To this end a State organization was effected, to be known as the Industrial Union, and a corps of officers elected for it. It is announced, in addition to the purpose above named, that it will aim to forward helpful legislation, check if possible the encroachments of corporated monopoly, and take a general interest in everything pertaining to the welfare of the producing masses. Charles Hasse, of Lansing, is Secretary of the Union.

Unity Church, Brigham and Crawford sts., Detroit, organized as Third-ave. Mission church June 7, 1882, as Unity

church of our Lord Jesus Christ Jan. 1887. Undenominational, but evangelical. Chapel built 1886; sittings, 200; property, \$5000; membership, about 100; Sunday -200. school, Sabbath services 10:30 and 7:30. S.



REV. C. E. HULBERT.

S. 2:30; prayer-meeting Wednesday evening; Y. P. S. C. E Friday evening. Pastor Chas. E. Hulbert was born at Sault Ste. Marie Oct. 12, 1840, grandson

entered the ministry June, 1867, ordained a Baptist minister May, 1869, withdrew from this connection July, 1875, has been pastor of Unity from the first. Residence, 52 Brigham st.; telephone, 4778-3R, per J. Knight & Son; at home to 9:30 A. M., 1 to 3:30, and 6 to 7:30 P. M.

University of Michigan.—The noble institution now known in all civilized lands by this title, was founded upon a land-grant by Congress to the Territory in 1804, but was not provided for until the first session of the Legislature after the State was admitted (1837), nor opened until 1841, the first class graduating 1845. Originally branches, little better than preparatory schools, were started at Detroit, Monroe, Pontiac, Romeo, Tecumseh, White Pigeon, Kalamazoo, and Niles; but the system was abandoned in 1850. The University has since had a solid and reasonably rapid growth, and has long been among the foremost schools of learning in this country. Students 2890-91, about 1400.

James Burrill Angell, LL. D., President of Michigan University, was born in Scituate, R. 1., Jan. 7, 1829, was graduated from

Brown University in 1849, spent two years in European travel and was study, Professor of Modern Languages and Literature at Brown 1853-60, editor of the ProvidenceJournal (Senator An-



PRES. JAS. B. ANGELL.

thony's paper) 1860-66, and President of the University of Vermont 1866-71. He was offered the Presidency of the University of Michigan in 1869, and declined it, but accepted upon a renewal of the offer in 1871, and came to his duties the same year. He was U. S. Minister to China 1880–81, by appointment of President Hayes; and in 1887 served as a member of the commission for settling the disputed fishery question with England. He is the author of many articles in the North American Review and other high-class periodicals

The character, strength and importance of this organization give it right to notice in the Year Book. It is a beneficiary order, with liberal life insurance, and was organized Oct. 27, 1858, from another society, by a few mechanics, headed by J. J. Upchurch, a machinist for the Atlantic & Great Western R. R. The Michigan Grand Lodge was formed Feb. 27, 1877, and made a separate beneficiary jurisdiction March 25, 1878. The order in this State has increased from 1101 at the close of 1877 to nearly 17,550 at the end of 1890, and in the country at large and Canada from 35,-886 to 250,000 in the same period. The offices of the Supreme Master Workman and the Grand Recorder are in the superb new University Building, Wilcox street, near Woodward avenue, Detroit.

The Rev. W. Walle W. Master Workman, A. O. U. W., was The Rev. W. Warne Wilson, Supreme born at Damerham, Eng., 1849, and

settled in

Detroitin

was elected

the first Master Work-

man of De-

troit Lodge No. 6, May

Grand Recorder in

the same year, Past

Grand Mas-

August

1877,

of

He

1872.

ter Work-W. WARNER WILSON, Supreme Master Workman, A. O. U. W. man in 1880, Re presenta-

tive of Grand Lodge of Michigan in Supreme Lodge 8th, 9th, 10th, 11th, 12th, and 14th annual sessions, Supreme Overseer in 1888, Supreme Foreman in 1889, and Supreme Master Workman in 1890. He is still also in service as Grand Recorder. Oct. 18, 1882, he was ordained Deacon in the Episcopal Church by Bishop Harris, and is now Assistant Rector of St. John's Church, Detroit.

Unitarian Church, corner Woodward ave, and Edmund Place, Detroit, was organized Oct. 6, 1850, and called its first pastor, the Rev. T. J. Mumford, the next spring. After occupation of business buildings on Jefferson avenue for

United Workmen, Ancient Order of.—I now known as Philharmonic Hall, at Lafayette ave. and Wayne st., was built, and dedicated Sept. 8, 1852. It was reconstructed and refitted in 1871 at a cost of \$17,500, which was nearly one and a half times the original price of the building. Membership 1850, 140; in 1860, 260; 1870, 300; 1880, 380. The succession of pastors since 1859 has been the Rev. Messrs. S. S. Hunting, A. G. Hibbard, J. F. Walker. W. R. G. Mellen, Calvin Stebbins, T. B. Forbush, and Reed Stuart, the present pastor, who came to this church from the Independent Congregational church in Battle Creek.

United States .- This term has been used, not only for the Unite! States of America (1776), but the United States of Mexico (1824), United States of Colombia (1861), and the United States of Venezuela (1864). The hopeful formation of the United States of Central America, to have been completed in August, 1890, has been indefinitely postponed by the late war between Guateand San Salvador. The exmala pected "United States of Brazil" became simply the Republic of Brazil.

United States Courts, Michigan.—The Federal Circuit Court for Michigan was provided for by act of Congress July 1, 1836. The Sixth Judicial Circuit, to which both Michigan Judicial Districts are attached, by act of July 23, 1866, consists of the States of Michigan, Ohio, Kentucky, and Tennessee. Circuit Judge, Howell E. Jackson, of Tenn.; Circuit Supreme Court Justice assigned to this Circuit, David J. Brewer, of Kansas. This is the appellate court from the U. S. District Court, and has original jurisdiction over all causes arising under Federal law except admiralty cases, and of litigation between citizens of different States and between citizens and aliens, when the amounts involved are more than \$2000. The Court sits in Detroit, beginning on the first Tuesdays of March, June, and November. Coincident with these are the terms of the U. S. District Court, which has also sessions in Port Huron and Bay City. This court has original jurisdiction in all cases arising under U. S. law, including admiralty cases, which are heard on the first Tuesday of each By act of Feb. 24, 1863, the month. State was divided into two Judicial Districts, the Eastern and Western, the latter having sessions of the District Court at Grand Rapids and Marquette, nearly two years, the church edifice presided over by Judge H. F. Severens.

Yale College in the class of 1856, af-

ter a year's travel in Eu-

rope took a

law course at

Yale and

Harvard, came to De-

troit and was

admitted to

the bar in

1860. He

Hon. Henry Billings Brown, Judge it has none. of the Eastern District, was born March 2, 1836, at Lee, Mass., graduated at (among the



was Legal Deputy U.S. Marshal 1861-3, Assistant U.S. District Attorney 1863-7, and began a general law practice in 1867, making admiralty law a specialty. After a short term as Circuit Judge of Wayne County, to fill vacancy, he resumed practice, and in 1875 President Grant appointed him to the position he now holds. He was a prominent candidate for the Supreme Bench when Justice Brewer was nominated, and is

now prominently mentioned for the present vacancy on that Bench.

United States of America.—The population of the country, by the recent census, numbers 62,480,540, exclusive of Alaska, whites in the Indian Terriatory, and Indians on reservations. Gen. Meigs estimates our populations for the next century as follow: 1900, 89,653,333; 1910, 119,737,177; 1920. 159,650,377; 1930, 212,867,177; 1940, 283,822,877; 1950, 381,763,837; 1960, 1980. 509,018,449; 1970, 678,691,205; 904,921,686; 1990, 1,206,562,248. Mulhall, the great English statistician, thinks the census will also exhibit a mechanical energy in this nation of 100 billion foot-tons per day and a total wealth of 70 billions of dollars,—"figures," he adds, "never before applicable to any nation in the world." says the working power of this country is three times that of France, 21 that of Germany, and 1\frac{2}{3} that of Great Britain. Our sea-coast line, with indentations, ascertained by the Coast Survey, is 78,389 miles, and total boundary lines 84,889, exceeding the united coast-lines of Asia, Africa, Europe, South America, and Mexico, by more than 2000 miles.

Where is the geographical center of the United States? Strictly speaking,

it has none. Taking Quoddy Head, Me., as the most eastern point, Alton (among the Alaska) Islands the most western, Point Barrow, Alaska, the most northern, Key West, Fla., the most southern, and forming a parallelogram, it appears that our geographical centre is 270 miles west of San Francisco, in the Pacific ocean.

Ninety-seven per cent of our people live where mean temperature in July ranges between 65° and 85°; and 70 per cent where the mean in January, the coldest month, ranges from 20° to 40°. [For U. S. Government, census statistics, etc., see Appendix.]

Uranium.—A mine of this metal, the only one yet found, has been opened in Cornwall, Eng.

Wall-paper.—One of the latest applications of electricity is to wall-paper so mounted that low-tension currents can be passed through it, moderately warming it and diffusing an agreeable temperature through the room.

Warren-ave. Baptist Church, Warren and Third aves., Detroit, was organized Oct. 26, 1888, and dedicated





free, and Rev. John Mathews. strangers welcome. Pastor John Mathews was born Dec. 29. 1833, in Jay, Essex Co., N. Y., studied at Madison (now Colgate) University, was graduated in 1858 and 1860, accepted call to the Lafayette-ave. church, Detroit, Oct., 1860, was ordained Feb., 1861, and took his present pastorate in 1888. Residence, 242 Warren avc. west; receives calls at any time.

Wayne County.—The population of this county is reported by the Census Bureau at 256,838; increase since 1880, 90,394. Its population is undoubtedly not less than 275,000. Taking the census figures, however, and deducting

these given Detroit (205,699), and there | but there is no record of its organizaremain for the rest of the county 51,-139. Wyandotte City has 3798. The assessed valuation of Wyandotte and the townships, with the taxes (except local) for 1891, was fixed by the Board of Supervisors at its October session, follow: Brownstown, **\$866,578**, as 10110w: Drownstown, \$500,576. \$1786.04; Canton, \$1,014,744, \$3008.98; Dearborn, \$1,202.313, \$3172.56; Ecorse, \$1,178,033, \$3651.36; Greenfield, \$2. 538,707, \$6447.18; Grosse Pointe, \$2,-001,263, \$4539.71; Hamtramck, \$3,-101,230, \$7360.91; Huron, \$534,848, \$2080.96; Livonia, \$953,677; \$1866.38; Monguagon, \$867,136, \$2140.50; Nankin, \$973,022, \$2561.00; Plymouth, \$2,555.00; Plymouth, 152,594, \$4914.31; Redford, \$1,167,817, \$2622 01; Romulus, \$578,962, \$1913.42; Springwells, **\$**3,333.803, **\$**7631.05; Sumpter, \$387,140, \$980.16; Taylor, \$391,036, \$954.95; Van Buren, \$981,079, \$2024.76; Wyandotte — first \$2024.76; Wyandotte — first ward, \$276,125, \$705.35; second ward, \$426,-676, \$1089.78; third ward, \$248,627, \$695.11. Totals, Wyandotte and townships, \$25,175,310, \$61,486.68; city of Detroit, \$143,993,448, **\$**333,677.25. Grand totals, \$169,168,748, \$395,163.93. Total of State tax to be raised, \$200,-498.81; county tax, \$123,318.43; sinking fund, \$20,726.44; poor and insane tax, \$30,681.57; rejected, charged back. fin. Dickinand delinquent, \$8010.50; drain tax, \$6665.75; expense of collecting county tax, \$5262.43. Rate of taxation, \$2.05 per \$1000, against \$3.31 last year. [For county officers, see Appendix.]

Wayne County Historical and Pioneer **Society.**—Organized to promote historical work in the county and State, genealogy of early settlers, etc. Resident members live in Wayne county and pay admission fees of \$2 and annual dues of \$1; life members pay \$10; there are also corresponding and honorary members, who may live anywhere. A book of "Chronography of Notable Events in the History of the Northwest Territory, Wayne County," has been published under its auspices. J. Wilkie Moore, president; Fred Carlisle, secretary, 51 Campau Building, Detroit. Provision is made for auxiliary societies in the townships of the county, whose members are also admitted to the

County Society. Wayne County and Detroit Courts.-

All courts of justice now holding sessions in Detroit are noticed below, except the United States Courts (which see).

tion. The county formed a circuit under the law of April 23, 1827, with a Supreme Court Justice as Judge; but under State law March 26, 1836, the Wayne Circuit stretched to the Upper Peninsula, including Mackinaw and Chippewa counties. March 25, 1840, the county alone became a circuit, with one judge under the Constitution of 1850, three judges by act of June 10, 1881, and four by act of 1887. courts have the ordinary powers of cir-Terms begin cuit courts in the State. on the first Tuesdays of January and April, the third Tuesday of June, and the second Tuesday of September.

Judge George Stedman Hosmer was born in Detroit May 13, 1855, lived in Buffalo 1866-9, graduated from Detroit

High School 1871, and the academic department of Michigan University 1875, was admitted to the bar 1878, in 1880 became junior partner of Grifson, Thurber and Hosmer, and was elected Judge in 1887. He is



JUDGE G. S. HOSMER.

serving a second term as one of the Detroit Public Library Commissioners. Judge Cornelius J. Reilly was born at Heart Prairie, Wis., May 26, 1848, was educated at Racine, Wis., came to



JUDGE C. J. REILLY.

resigned CIRCUIT COURTS. - A Circuit Court from poor health Nov., 1879, and in in this county was provided for in 1800, 1882 was defeated for the same office by

Detroit 1867. was admitted to the bar 1871, four later vears was appointed Circuit Judge to fill vacancy caused by resignation of Judge Patchin, and succeeded himself for the full term in 1876. He only 48 majority. sumed general practice, and in 1887 was again elected by a handsome mal School, majority.

WAYNE COUNTY.

Judge George Gartner was born Oct. 10. 1850, at Grosse Pointe, Mich., of Ger-

man parentage, attended at the State Normal School and the Law Department of the Universi graduating in 1872. came to De troit and began success ful practice. was Assistant Prosecu-Attor ting



JUDGE GEORGE GARTNER.

the oldest

French fam-

ilies here,

was born on Grosse

April 3,

1848, was

admitted to

the bar in

1874, was Prosecutin g

Attorney for

Wayne

county in

1876-80, and

in 1887 was

elected Cir-

Isle

1885-7, ney tried over 500 State cases, and in 1887 was elected Circuit Judge. He served on the Detroit Board of Education four years, and was President of the Board one year.

Judge Henry N. Brevoort, descendant of one of



JUDGE H. N. BREVOORT.

cuit Judge.

PROBATE COURT, DETROIT.—This is among the oldest of the local courts, one case of administration on record being dated 1797. It has the ordinary powers of Surrogate or (in this State) of Probate Courts. A Register of the Court was provided for in 1809, abolished 1835, and restored in 1861. court is virtually in perpetual session, open every secular day at its rooms in the City Hall, from 8 A. M. to 4 P. M.

Edgar O. Durfee, Probate Judge, was born near Livonia, Wayne Co., vember.

Judge Reilly re- Mich., Oct. 28, 1842. He attended the

State Norand took one year at the State Uni versity. the civil war he served with the Twenty. fourth Michigan Intantry, losing his right arm in the battle of Gettysburg. He then settled



JUDGE E. O. DURFEE.

in Detroit, began the study of law, and in 1872 was appointed Register of Probate under Judge A. H. Wilkinson. In 1876 he was elected Probate Judge, and re-elected in 1882 and 1888.

RECORDER'S COURT.—By law of Feb. 5, 1857, this was substituted for the Mayor's Court. It takes cognizance of all cases not subject to final disposition in the Police Courts of the city, and those over which such courts have no jurisdiction, concerning offenses against the city charter and ordinances and criminal offenses under the State law committed in Detroit; also of matters related to the opening of streets and alleys, etc. In 1889 the Legislature granted this court an Associate Judge, Its terms are held in the new Municipal Building, at Clinton avenue and Raynor street, beginning the first Wednesdays of January, March, May, July, September, and November. City ordinance cases are heard on Mondays.

Associate Judge F. H. Chambers was



JUDGE F. H. CHAMBERS.

admitted to the Michigan bar November, 1867, was Circuit Judgeof Wayne county 1879-87, was appointed Associate Judge of this court in July, 1889, and elected in the following NoMiddlebury College 1839 and at Yale Law School 1841, was admitted to the Ohio bar the same year and to the Michigan bar in 1855, was elected Recorder - Judge November, 1866, and served continuously until 1889, when ill health compelled him to retire from Judge Swift has never active service. had a portrait taken, and naturally declines to supply one for the Year Book.

Police Courts.—A Police Court was established here by law of April 2. 1850, and a second Justice given it by act of 1885.

JUDGE EDMUND HAUG.

They conduct all preliminary examina tions in criminal cases, and have juris. diction over violations of any city ordinances whichexpressly give them jurisdiction, and over violations of State

law in Detroit in which justices of the peace commonly have jurisdiction; and may bind over to the Recorder's Court or sentence to the House of Correction or commit to the House of Good Shepherd in certain cases. The

Police Courts sit every weekday in the new Municipal Building, cornerof Clinton avenue and Ravnor street.

Justice Edmund Haug was admitted to the bar at Mar shall, Mich., in 1882.

He JUDGE P. J. SHEAHAN. was elected Police Justice of Detroit 1885, and reelected 1887. He became Senior Justerm expired.

Justice Patrick J. Sheahan was admitted to the bar in March, 1888, and P. M.

Judge George S. Swift graduated at | was elected a Police Justice the next vear.

> JUSTICES' COURTS, DETROIT. — Justices of the Peace were provided for in the early day of the Northwest Territory, 1788; and several were commissioned for Wayne county in 1796. There were formerly four for the city, then six, then four again by law of 1883. They have original jurisdiction in civil actions where the debt or damage does not exceed \$100, and concurrent jurisdiction with the Circuit Courts in civil actions on definite or implied contracts to the amount of \$300. Appeals lie from them to the Circuit Courts. Sessions are held daily, 9 to 12 and 2 to 4 o'clock, in the building on Congress street east, near Bates. tice John Patton is now the Senior Justice, having been elected in 1880. Justice Walter Ross was elected in 1882, and will be succeeded July 4, 1891, by Thos. W. Fitzsimmons, Justice-elect. Justice O. L. Kinney was elected in 1888, and Justice James Phelan in 1889.

> Westminster Presbyterian Church, Woodward ave. and Parsons st., Detroit, colonized from Fort st. church

1857, worshiped on Washington ave, till present superb structure ready 1881. Sittings, 960; membership, 612. Seats free at evening services. New chapel with complete equipment nearly finished. Prof. Albert



REV. HOWARD DUFFIELD.

A. Stanley, of Mich. Univ., organist and musical director; one of best quartette choirs in city; a chorus also in contemplation. Sunday services 10:30 and 7:30; Sunday-school, at 12. Rev. Howard Duffield, D. D., pastor, was born at Princeton, N. J., April 9, 1854, was graduated at Princeton College 1873, Seminary 1877; installed at Westminster April 10, 1884; received tice last spring, when Justice Miner's D. D. from Princeton 1888. Residence, 694 Woodward; telephone, 4662; receives calls Mondays, 7:30 to 9:30

West Baptist Mission, Scotten ave. and Visger st., Detroit, has yet no church building, but owns a site and

will fully p organize a church and build soon. It was established by the Twelfth-st. church. Average attendance, about 100; of Sunday school, 75. Rev. S. W. Titus, in charge, was born in Sandy



REV. S. W. TITUS.

Creek township, Oswego Co., N. Y., June 11, 1819, was ordained in Chaplesburg, N. Y., Aug. 27, 1845, and served in various pastorates for more than 40 years, among them Flint, Mich., and Twelfthst., Detroit, until failing health compelled retirement. He lives at 433 Lincoln ave.; welcome callers at any time.

Wealth of the World.—Estimated at **\$253,750,000,000.** In 1882 England had £7,178,000,000, or £262 per head of population; Scotland, £990,000,000 £552,000,000 (£83). (£101); Ireland, United wealth of Great Britain and Ireland, 1887, £9,210,000,000. countries of Europe, by latest returns:

	£8.060	£ 218
France		æ 210
Germany		140
Russia	4,343	58
Austria	3,613	95
Italy	2 351	82
Spain	1,593	93
Portugal		
Belgium	806	145
Holland	987	240
Denmark	366	198
Sweden	977	153
Greece	211	

The total wealth of the United States in 1880 was \$43,642,000,000, or \$870 per head. It is now hardly less than \$64,000,000,000, or about \$1000 for every man, woman, and child.

Wheat Harvest nearly rounds the year in different parts of the world. It occurs in January in Australia, New Zealand, Chili, and the Argentine Republic; February and March, in Upper Egypt and India; April, in Lower Egypt, India, Syria, Cyprus, Persia, Asia Minor, Mexico, Cuba; May, in Texas, Algeria, Central Asia, China, Olympus, and the Pharos or light-house Japan, Morocco; June, in California, at Alexandria. Older authors substi-

Oregon, Mississippi, Alabama, Georgia, North Carolina, South Carolina, Tennessee, Virginia, Kentucky, Kansas, Arkansas, Utah, Colorado, Missouri, Turkey, Greece, Italy, Spain, Portugal, South of France; July, in New England, New York, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Iowa, Wisconsin, Southern Minnesota, South Dakota, Nebraska, Upper Canada, Roumania, Bulgaria, Austria-Hungary, the South of Russia, Germany, Switzerland, South of England; August, in Central and Northern Minnesota, North Dakota, Manitoba, Lower Canada, Colombia. Belgium, Holland, Great Britain, Denmark, Poland, Central Russia; September and October, in Scotland, Sweden, Norway, North of Russia; November, in Peru. South Africa; December, in Burma.

Winans, Edwin B., Governor-elect of Michigan, is a native of the Empire State, born at Avon, Livingston Co.,

May 16, 1826, but coming to Michigan with his parents eight vears afterwards. He received his higher school education at Albion College, engaged in gold mining in California **F** 1850 - 58settled L



GOV. E. B. WINANS.

on the farm he has since occupied at Hamburg, Livingston Co., Mich. He was a member of the lower house in the State Legislature 1861-65, one term Judge of Probate, and Representative in Congress 1883-87, and elected Governor on the Democratic ticket 1890, by plurality of about 12,000 over James M. Turner, his Republican competitor. He will take the gubernational chair Jan. 1. 1891.

Wonders of the World.—The seven wonders of the ancient world are commonly given as the pyramids of Egypt, the mausoleum of Athens, the temple of Diana at Ephesus, the walls and hanging gardens of Babylon, the Co-lossus of Rhodes, the statue of Jupiter tute the Egyptian labyrinth and the artificial Lake Moeris for the mausoleum and the Pharos. The seven natural wonders of the New World are considered to be Niagara Falls, the Yellowstone Park, the Mammoth Cave, the Canons and Garden of the Gods in Colorado, the Big Trees of California, the Natural Bridge in Virginia, and the Yosemite Valley, California.

Woodward-ave (Second) Congregational Church, corner Sibley st., was organized 1866, colonized from the

First church. and erected its present fine building 1873. Seating capacity. 1 700. Sunday L services 10:30 and 7:30, S. S. at 12, young peo ple's meeting & 6:45; mid. week meet 7:45 esday, ing Wednesday, Young Peo

REV. H. P. DE FOREST.

1860, and

dedicated its

perb temple

in Jan., 1887.

Total church

property, in-

cluding mis-

sion chapel,

North Russell

su-

present

ple's Society REV. H. P. DE 7:45 Tuesday each month. Pastor H. P. De Forest was born at Brockton, Mass., Aug. 20, 1839, was ordained Dec. 18, 1867, and took his Detroit pastorate first Sunday in June, 1889. Residence, 33 Charlotte ave.

Woodward-ave. Baptist Church (formerly Lafayette ave.), Woodward and Winder st., Detroit, was organized in



st., estimated at \$180,000. Membership, 644. Services Sunday at 10:30 and 7:30, REV. C. R. HENDERSON. Sundayschool at 12, special class of adults at 3:30; mid-week meeting for study and worship Wednesday at 7:30 from October to May, 7:45 May to October;

conversations on social laws Tuesday evening twice a month; public cordially invited to all. Rev. Chas. R. Henderson, D. D., pastor, is a native cf Covington, Ind., born Dec. 17, 1848; ordained Aug., 1874; called to this ohurch July, '82. Residence, 77 Watson st.; telephone, 4040; office hours 1:30 to 2:15, and Thursdays also 5:30 to 6:30.

Wool .-- The Northern States grow nearly four-fifths of the wool raised in this country. Ohio leads all the States with nearly 26,000,000 pounds annually; California ranks next with about 17,000,000. Missouri and Texas are the principal wool-growing States of the South, the former with about 8,000,000 and the latter 7,000,000 pounds. Montana grows 1,000,000.

Writing-paper.—The average English adult consumes 101 pounds a year; American, 8; German, 7½; Frenchman, 31; Russian or Mexican, 2; Italian or Austrian, 11; Spaniard, 1.

Wyoming was admitted to the Union July 10, 1890. She has 97,575 square miles, or about three-fifths more than Michigan; and had a population in 1880 of 20,789, in 1890 of 60,589, showing nearly 300 per cent of increase.

Zion (First) German Reformed Church, Detroit, organized Nov. 20, 1849, worshiped in the City Hall, dedicated a

brick sanc 🖫 tuary on 🖟 Croghan, near Beaubien, and July 6, 1890, dedicated their beautiful new building at Chene and Sit-Jay sts. tings, 300, with arrangements for 500 to 700 more; value of property, \$15,-000. Sunday



REV. C. F. W. HASTEDT.

services 10:30 and 7:30, S. S. 9 and 3; religious instruction 9 A. M., Saturday. Everybody invited. Rev. Carl F. W. Hastedt, pastor, was born in Diepholz, Hanover, May 28, 1853, came to America 1868, entered the ministry 1871, and labored in Ohio until called to Zion church 1887. Residence, 412 Chene st., corner Jay; may be seen at young people's meeting Friday 7:45: any time.

# THE DETROIT JOURNAL.

# How a Modern Daily Newspaper is Published.

A subscriber, who signs himself "Constant Reader," asks, "Will you please publish a description of just how the Detroot JOURNAL is issued?" This question is not easily answered without subdivision, and it will therefore be treated in installments.

It is doubtful if there is any other business so dependent upon the accurate daily dealing the hands of the corps of editors. This is all with a multitude of details. Should an ac-"up stairs." Were an editor to write this cident befall any one of the thousands of article on the Detroit Journal, he would

cident betail any of little pieces of type that are handled every day in setting up the Journal, some critical friend still write in friend will write in to call the Journal's attention to the bad proof-reading. If there should be an error in any of the hundreds of statements in any issue during the year, it is pounced upon by the 100,000 pairs of eyes which daily scan the Jour-NAL, and the discovery is duly transferred to a postal-card correction. The 500-eyed fly is insignificant, even as a type of watchfulness, compared with "Constant Reader," with his 100,000 pairs of eyes. The answer to the first installment, therefore, is, that the DETROIT JOURNAL is published in a glass house.

Five times a day viz., at 8, 9:30, and 11 A. M., and 2 and 3:30 P. M., the letter carrier arrives with packages of letters, often running as high as one or two hundred at a time; and although they concern every possi-ble phase and de-

partment of the business, the more inexperienced writers invariably address them to "The Editor," who, it would seem to them, consists of one man, who does practically all the work. The mail is opened by the proprietor and sorted into departments, and then a whistle-signal brings the office-boy, who takes it to the various destinations. From this it may be inferred, as a second answer, that it requires more than one man to get up the daily issue of the DETROIT JOURNAL.

Following the boy with the mail, a fair average illustration of the points of contact would be about as follows: The package laid on the Managing Editor's table contains communications, circulars, requests, criticisms, copy, etc., etc., which is speedily subdivided and delivered to its respective destinations, in

begin and end his article there, as being the only thing really worth mentioning about a daily newspaper. There are other departments, however, and the boy has not finished his mission until he retraces his steps to the lower regions. He will find an errand to the Accountant's department, with letters containing bills and collections and acknowledgment of orders, to illustrate, for another car of paper, or a few more barrels of Next the Subink. tending the sale and circulation of the paof the Advertising department is delivered the "changes" of advertising, requests for rates, to-

scription department will receive the tokens of the suc-cesses and trials atper; while to the head the gether with all the parts of the complicated details of his department, which is communicated through the mail.
There remain only
two departments, viz., the Mechanical (subdivided into the

press and the stereotyping rooms), and the composing room, where the type-setting is done by a large force of compositors. This brief outline of six departments, will give a third answer to the question viz., that the men who issue the paper are organized into departments, hav-

ing distinct and important duties.

The fourth answer is that the co-operation of these departments each day is as e-sential to the issue of a paper as the working together of the wheels of a watch. Not one can



W. H. BREARLEY. (Proprietor and General Manager Detroit Journal.)

be spared, and in this sense they are alike essential, although diverse in their method of action. There is no day of the year when the action. There is no day or the year when the Editorial department can absent itself, for the Detrort Journal publishes "t.day's news today." The news must be put into type before it can be used. The pressmen can not print from the type, as stereotype plates must first be made, and then comes the hurry of the complicated Circulation department, with its clerks, carriers, agents, and the army of boys, to handle and dispose of the papers when printed. Out of several hundred supposable incidents illustrative of this absolute dependance of one department upon another, the following is a fair sample of what may occur

any minute of any day in the year: A telegraph message from an interior town gives the details of some important occurrence. The paper is nearly ready to issue, and the space is full. The news is too important, how-ever, to be left out, so it is rushed into shape by the editor with his pencil, a boy standing at his elbow to take each sheet as he scrib-bles it off ( wonder how many of the readers would enjoy this way (f preparing matter for 100,000 pairs of eyes!). The Managing Editor gives the foreman of the composing room directi us as to which article already in type he can leave out to partly make room. He then sends for the head of the Advertising

department to come up and leave out one or two advertisements which can be inserted some other day. The Managing Editor has one more duty to perform. This is accom-plished by sending information of this article to the head of the Circulation department, so that extra papers can be sent to the tewn from which the news came. This co-operation of departments has numerous and intricate ramifications that can not be easily explained.

In war it is often possible to employ one division of an army and hold others in redivision of an army and note officers in teserve, but in the publication of a newspaper, which is not unlike a battle, every man is worked to his full capacity every day. So great is the daily strain, that it is a source of wonder to those familiar with the inside workings of a newspaper that mistates and oversights do not occur more frequently. When "Constant Reader" imagines he finds in some simple error an evidence of malice, or in the accidental missing of the delivery of a single paper some intentional slight, he imagines an approximate impossibility. business of a great daily paper is to publish the news, and it has no time or inclination to divert its attention to the expression of malice. It has everything to gain by trying to

treat each separate item with exact justice and fairness, but it would be strange indeed if errors were not made, through pure inadvertence, in the rush and whirl of the daily routine. When a reputable paper publishes an error, it injures itself more than any outside enemy can possibly injure it. No paper will willingly hurt itself.

The fifth specification of this composite answer is, therefore, that the DETROIT JOUR-NAL is published daily, under a pressure and strain that attend the workings of few other kinds of business, and with attempted accuracy in all its statements.

Unfortunately, sixth, there is no way yet invented to retain all the money that comes



EDITORIAL DEPARTMENT. (C. F. Leidy, Managing Editor.)

into a paper. The financial demands are as importunate as taxation or death. While the income is fluctuating and dependent upon the circulation and the advertising patronage, the expeuses wait for nothing, and like the poor, "are ever with us." To say nothing of the pay-roll of about 70 men, and the paper bought by the car load and used by the ton, there are bills for telegraph, telephone, correspondents, and other necessities almost innumerable. At a recent session of the Michigan Press Association, one of those present from an interior town complained of the expense he was subjected to in purchasing "plate matter." He had, so he said, to pay for it \$2.00 a page, of six columns. It may be explained to the uninitiated that "plate matter" is the matter supplied from New York or Olivine in the property of the prop York or Chicago, in stereotype plates, one col-umn wide, so arranged that they can be cut up and used as wished, without any edit-ing or type-setting. The matter is edited in New York, and then thousands of duplicate plates are made, and sent to any paper desiring it, having a purely local circulation. While therefore the local paper of a small town buys three-fourths of the matter used, all edited and made into plates, at \$2.00 for six columns, the JOURNAL pays about \$2.00 per column for the mere type-setting alone. All of the matter in the DETROIT JOURNAL is set up new, and costs no small sum to

procure and edit.

The organization of the DETROIT JOURNAL into close, co-operating departments within itself would not be effective, without both receiving and contributing to outside associations. Of these, the Associated Press is the most important. This news-gathering organization, with national headquarters in Chicago and New York has agents in every large city in the United States, and is connected with similar foreign associations. The Michigan agent is located in Detroit and calls at the JOURNAL every hour or two, every day, to learn of the happenings throughout Michigan, which come in hourly from the Journal's cor-respondents in every city and town in the state. From this he selects the most impor-tant and wires it to Chicago, where the news received from all sections of the country in a similar way is made up, and sent out by wire

by Woodward avenue, the eastern side being by Worldwight Mr. Towle and the western by Mr. Garnsey, who hire their own carrier boys, purchase each day at wholesale some thousands of Journals, direct their distributions of the state tion, and make their own collections. Orders or complaints received at the JOURNAL office from these districts are turned over to these carriers.

Outside of Detroit, the circulation is by mail or through agents. The latter method is employed in the 350 towns large enough to support a free house-to-house delivery. Bundles of papers are made up each day and ex-pressed to these agents, who go to their depots when the trains arrive, to receive and distribute the papers sent. Once a week they collect for the papers delivered. The uniform price in and out of Detroit is 10 cents per

The press-room view of the newspaper is interesting, but difficult to understand by the inexperienced. The type, locked in "forms" at stated periods, comes down from the composing room upon the elevator. It is seized by

stereotypers, the and by means of a process requiring about ten minutes and a high degree of skill, a paper matrix is produced, from which duplicate plates are cast - four plates from each form." These plates are then placed upon the iwo perfecting presses, two or these plates upon each press. Thus each press is soon equipped with enough plates to produce two complete papers, or tour papers simultaneously from the two presses. Large rolls of paper are unwound automatically at one end of each press, and running in and through it to the opposite

on both sides complete, cut apart, cut off, folded, and ready for sale and delivering. The producing 40,000 complete papers per hour (printed on both sides and folded complete), and is equivalent to the entire capacity of four hundred Washington hand-presses. The significance of this statement is more apparent when it is understood that one of these primitive presses. which Fiankone of these primitive presses, which Franklin invented and used, is still employed as the sole outfit by more than half of the news-

papers of America.

The details of the Advertising department are important, complicated, and technical, requiring the undivided time of a force of exrequiring the undivided time of a force of ex-perienced men. The Journal's equipment in this respect is one of the best, and its repre-sentatives command the respect of the business public, and secure their full share of adver-tising patronage. The difficulties and intri-cacies of this one department are such that the proper discussion of any one of its many subdivisions would require the space given



CIRCULATION DEPARTMENT. (Fred Slocum, Manager.)

to all the papers receiving these dispatches. Thus thirty or forty thousand words of telegraph matter, or several times what the JOURNAL deems important enough to use, are daily la'd down in the JOURNAL editorial rooms, the price being a fixed amount weekly.

The view of a newspaper from the stand-point of one of the 2000 or more licensed Detroit newsboys is not unimportant. He must get a permit at the Mayor's office and a license at the Police headquarters, and a badge which will cost him 10 cents; and he is ready for business. He can buy his papers at wholesale, one cent per copy, at the Jour AL's newsboys' room, or from any one of the thirty distributing stations, which are located at various points about the city. Some of the boys content themselves with peddling on the street at retail, two cents per copy, while many others have worked up routes of their own and have lists of regular subscribers, who are not known at the office.

The newsboy is not the only agent of delivery, for Detroit is divided into two sections

this entire article. But "Constant Reader" may wonder, if, with all this machinery of departthis entire article. But "Constant Reader" may wonder, II, will ain this macinitery of department organization, the Gen'l Manager has anything left to do. The following daily routine will answer this question: At 8 A. M. comes the care of the first mail, followed by the looking words with the head of each. Then a tour of the different departments, and a few the 9:30 mail, followed by

receiving and discussing book-keeper's report of the pre-ceding day, which includes the number of papers printed, how disposed, the amount of advertising contracts made, the amount of advertising billed, and the advertising actually ex ecuted (this obtained each day from an inventory made of what the paper contained), the cash-collected for advertising and from sales of papers, the amount paid, and the cash on hand. The discussion of these reports and the thousand and one interrup-tions consume the forenoon and portions of the afternoon. Between 4 and 6 p. m. each day occur the consultations, separ ately with the heads of departments, concerning the day past and the one to come.

Without doubt, the highest place of honor and responsibility belongs to the Editorial depart ment, which has been reserved to the last that it might be more

fully described.

The Journal's editorial force consists of five local news reporters, a city editor, marine reporter, market reporter, society editor, state editor, an editorial writer, a managing editor, and the managing editor's assistant.



ADVERTISING DEPARTMENT. (A. H. Finn, Manager,)

Contrary to the rule in most lines of business, the superior officers, if the word may be used, have to do the most work. The managing editor on an afternoon paper is usually the first man at his desk. He comes into the front door as the bells are ringing 7 o'clock. The city editor comes along about 20 minutes later, and the reporters soon follow. By 25 minutes to eight everybody is hard at work.

to eight everybody is hard at work.

Take the local department first. The city editor first arranges and distributes the night news items among the five reporters, who verify them by telephone and otherwise and write them out in very brief form. The work of verifying, correc ing, and condensing this matter occupies from an hour and a half to two hours. As soon as each item is complete it is carried to the city editor, who reads and corrects it and, whenever possible, cuts out superfluous works and phrases. It is then carried to the managing editor, who also reads it and catches any errors which may have passed the city editor unnoticed. From the managing editor, who call the control of the city editor unnoticed.

itor's desk a cash-carrier takes it into the composing room, where the foreman sits with a big pair of shears.

with a big pair of shears.

If it is more than half a page long this functionary cuts it into "takes" and distributes them among the printers. Soon afterwards the printer returns the "take" of copy together with a take of type all "set up." The takes of type are laid together in column form and wedged into a flat, shallow, oblong box lined with brass and called a "galley." The "devil" then inks the type, lays a strip of paper over it, and rolls a heavy iron roller over the paper. When the paper is taken off it has the item or items printed on it. This is called the first "proof." The proof-reader compares it with the original matter and marks all the printer's errors. Incidentally he somethe printer's errors. Incidentally he sometimes detects errors which have escaped the editors and corrects them also. The the editors and corrects them also. proof-reader should have an eagle eye and a general knowledge of everything from Egyptian history to the latest theory on the cure of consumption. When the proofreader errs there is no one to correct him, until it is too late. Then he gets corrected.



ACCOUNTANT'S DEPARTMENT. (F. A. Batchelder, Cashier.

It is the devil's duty to cut up the proofsheets and hand them back to the printers, who thereupon make the corrections in the type. A second proof called a "revise" is then taken, and more corrections are made if necessary. The same course is pursued with advertisements.

As each item or "ad" is completed it is carried to the "stone." From there the foreman carries it to the forms and lays it in its assigned place. A "form" is simply an iron chase filled with type the size of the newspaper. When a form is filled with type, it is chase lines with type the baper. When a form is filled with type, it is "locked up." It is then sent to the stereotyping room. There it is placed upon a table and a sheet of wet paper pulp laid upon it. The whole is then put into a press and squeezed down until the face of the type is buried in the pulp. It is then put into an oven. The heat dries and expands the "locked that in a few minutes it may be peeled pulp, so that in a few minutes it may be peeled

ing, or to report a trial. Sometimes there are no assignments. In that case each reporter "takes his beat," and the "loose man" goes out on a general skirmish. On other occasions when something of unusual interest occurs one man may be obliged to attend two or three beats, and several be assigned to look

or three beats, and several be assigned to look up different phases of the great event.

There are four regular beats on the JOURNAL.
They are "courts," "municipal," "crime," and "Windsor." The Windsor man usually disposes of his beat between 10:30 and 1 o'clock, and devotes the remainder of his time to general work. He is represented for time to general work. He is responsible for

all events in Essex county.

The municipal man attends meetings of the council, obtains routine news in the city and county offices, reports all kinds of delays, county offices, reports all kinds of delays, proceedings, and results of the city contracts and the workings of the different commis-sions, and is ever on the lookout for dishon-



COMPOSING ROOM DEPARTMENT.
(P. N. Bland, foreman.)

off the form. The type has left a deep impression upon the paper which is called the "matrix."

This matrix is immediately placed in a halfcylinder and molten type metal poured in upon it. When the metal has cooled it is taken out—a complete half-cylinder shaped plate with the converse side molded into letters, words, sentences, paragraphs, and articles. When all four of the forms have been thus treated the "plates" are locked upon the cylinder of the press, steam is turned on, and Journals begin to come out.

But to return to the editorial rooms. It is 9 o'clock, and the night news has all been written up and is in the hands of the man-

aging editor.

The city editor proceeds to give his assignment of the city editor proceeds to give his assignment of the city editor. ments. Each reporter is requested to interview so and so, to look up such and such an event, to obtain a biography, to attend a meet-

esty, incompetency, and corruption among persons who serve the people. The municipal reporter is the watch-dog of the treasury. He can not entirely prevent robbery, but he restrains it. Boodlers and corruptionists fear But for the municipal reporter the city would be at their mercy.

The court reporter inspects all papers filed at the beginning and at all stages of every suit begun in any of the civil courts, and reports upon important cases at certain interesting stages. He also watches the daily records of the judges' work and reports all important actions. But for him thousands of cases tried in the courts would be unheard of, except among a few attorneys, and many villains, now known and shunned, would be able to pass as honest men, and to practice their villainy under the cloak of a good busi-ness and social position. On the other hand the court reporter delights to hold up honest and honorable men as bright and redeeming spots in the dark pictures which he is often

compelled to draw.

The criminal reporter visits the police head-quarters, police court, poor commissioners, and city physician's offices, and keeps in constant telephone communication with the coroners, hospitals, ambulance stations, and fire headquarters. If a barn burns in Springwells he must know of it. If a dock-laborer at 24th street loses his finger he is supposed to receive immediate notice from some quarter. Burglaries, assaults, murders, and outrages of all kinds he is expected to know of as soon almost as they occur. From the opening of the police court at 8 o'clock, until the last

minutes before going to press, he must be continually on the alert. A good criminal reporter must have the perspicacity of a detective, the in-dustry of a beaver, and the tact of a diplomat. He exposes all kinds of crime, and brings many criminals to justice by poking up detec-tives and making them work hard. He is hated and dreaded by incendiaries roughs, burglars, and other wrong-doers.

The loose man visits the hotels, interviews notable guests, inves-tigates stories sent in by telephone, and writes special articles. His work is pleasant, varied, and interesting. He exposes neglect of duty on the part of public cor-

porations.

The five regular re-porters "turn in" their matter three times a day. The ma-rine and society reporters are not regular attaches of the staff. They choose

upon him devolves the duty of keeping Jour-NAL readers informed of all the occurrences in the great State of Michigan. To this end he has a system of special correspondents (one in nearly every city and town in the State), which furnishes him with a multitude of items, by mail, telegraph, and telephone. He items, by mail, telegraph, and telephone. must also read 1000 State papers a week, in case the correspondents should by any possi-bility overlook some event of interest, and must daily prepare a column of brief state notes. In addition to this devolves upon him the handling of the dramatic criticisms, preparation of book notices, and help with the night telegraph.

The managing editor's assistant prepares

the digest of foreign and domestic news at the head of the editorial column, helps to chop out the reprint, and does whatever else offers.

The editorial writer keeps abreast of the

times and writes editorials.

The Managing Editor reads and approves of every line of matter, excepting advertise-

ments, that goes into the paper. He reads the Associated Press dispatches and selects those which are important enough to use. He reads the general exchanges and selects the reprint. He receives reports from the marine and society reporters and corrects them, looks over the final proofs, makes suggestions, exercises supervision in all departments writes the "kaleidoscope" items, and does other things too numerous to mention.

The reader expects, when he takes up the Journal each evening, to find it attractive bright, interesting, and full of new readable and reliable matter. To produce this result day after day, every day in the year, requires an effort something akin to that of a clergy-



MECHANICAL DEPARTMENT. (N. W. Healy, Pressman; Geo. Curtis, Stereotyper.)

their own hours of work and turn in matter man who should preach a fresh, new sermon at stated intervals.

The State editor is a hard-worked man, and The number of different persons necessary

to the getting out and disposing of each day's issue of the DETROIT JOURNAL, would probably exceed 2000. About 70 are carried on the payroll, but to these should be added the 400 cor-respondents in Michigan cities, and 350 or more business agents also in these places, as well as a thousand or twelve hundred news-boys in Detroit and Windsor, all of whom depoys in Detroit and windor, and of whom derive all or some portion of their income every day from their connection with the Detroit Journal. This estimate does not touch upon the problem of gathering news by the Associated Press, in all parts of this country and foreign countries, for if their representatives were added, it would double if not quadruple the number of different persons who each day the number of different persons who each day

are essential to the issuing of this paper.
In conclusion, the Journal trusts that "Costant Reader" will not restrain the epistolary evidence of his watchfulness, for it is a pleasure to know that readers feel a proprietary interest in the paper of their choice, and their letters and their calls are always welcome.

# APPENDIX.

Material for the following paragraphs was received too late for insertion in its proper place:

Bethel A. M. E. Church, Napoleon and Hastings sts., Detroit, is a recent structure, brick with stone trimmings, gothic style, fitted with church-parlors, library, class rooms, study, kitchen, and all needed modern conveniences.

Sittings, 700; cost, \$18,000.

Rev. Jas. M. Henderson, late pastor, was born at Evansville, Ind., Sept. 19, 1859, graduated at Oberlin 1881, and received honorary M. A. from same college 1884; taught in Afro-American High School, Evansville, was licensed to preach in 1883, ordained deacon and elder 1883-85, preached at Bloomington, Ind., and came to Detroit 1886. Here he was mainly instrumental in building the handsome edifice now

occupied. At the late Conference meeting in Saginaw he was appointed Presiding Elder for Michigan and Northern Indiana. He has written much for the press, and is regular correspondent for three of his race-papers.

Correction .- In the notice of Asbury M. E. Church, page 18, for "young people's meeting Friday, 7:30," read "Epworth League Meeting Friday, 7:45," and for "638 Grandy ave." (residence of pastor), read "1294 Chene street."

U. S. Supreme Court.—Since the sheet of the Year-book containing a notice of the United States Court went to press, Judge Henry B. Brown, of the Federal Court for the Eastern District of Michigan, has been appointed by President Harrison a Justice of the Supreme Court.

# EVENTS OF THE YEAR.

DECEMBER, 1889.

13.—London fog; 11 drowned, many in-red. Cave in at Iron Mountain, Mich.; 3 lled. Warren Leland, jr., hotel proprietor, jured. killed. fails.

-Petoskey high-school building burned. Floods do \$250,000 damage in Sutter Co., Cal. Three nitro-glycerine magazines explode n-ar Warren, O.: \$100,000 loss. Business part of

New Carlisle, O., burned.

15.—Epworth M. E. church, East Saginaw, dedicated. Earthquake in Granada, Spain.

16. Influenza epidemic in Europe; 100,000 cases in Paris, 15,000 in Berlin. Famine in Galicia. Burke, Coughlin. O'Sullivan, and Kunze found guilty of Cronin murder; Beggs acquitted. U.S. Supreme Court decides law taxing talenhous menits unconstitution.

acquitted. U. S. Supreme Court decides law taxing telephone receipts unconstitutional.

17.—"La grippe" in Detroit. Dynamite explosion at Cleveland mine, Ishpeming; 2 killed. Str. Tenby Castle wrecked off Holyhead; 11 lost. Premature blast Osceola mine, Calumet; 3 killed. Whittier 82 years o'd.

18.—Prohibitory liquor law passes North Dakota Legistature. Justice Brewer confirmed

19.—D. Moshier killed by Lake Shore train. Detroit. Fire in Tilden school, Detroit; 7 girls fatally burned, 13 others seriously. 20.—Str. Cleddy sunk off the Isle of Wight,

by collision with the Isle of Cyprus; 13 lost. 21.—Brazil Provisional Government decrees

21.—Blazi Provisional Government decrees banishment of ex-Emperor and family. 22.—Cave-in at Angels' Camp, Cal.; 16 miners killed. Corner-stone Bethel A. M. E.

church laid, Detroit.

24.—Vicksburg, Miss., fire; \$160,0^0 loss.
Czar and King of Portugal down with in-

fluenza.

25.—Remarkably mild Christmas; ther mometer 60° in many parts. Thunder storm in Southern Michigan. Astronomer Brooks-discovers his third comet for the year.

26.—Main building Western College, Toledo, Io., burned; \$150,000 loss.
27.—Revival services begin First Baptist

church, Detroit.

28.—Accident on Chesapeake & Ohio R. R.; 10 killed. Gov. Goodell of N. H. orders enforcement of prohibitory liquor law. Eight negroes lynched at Barnwell C. H. S. C. Carlos I. proclaimed King of Portugal. Family

of 11 burned at Hurontown, U.P.

29.—Great snow-storm in Kansas and Missouri. Amphitheatre fell at bull-flight, Villa Laredo, Mex.; 100 injured.

30.—Gladstone 80 years old. New Academy of Music, St. Louis, Mo., collapsed with 50 workmen; 1 hurt.

31.—Collision on Panhandle R. R., Kokomo, Ind.; 3 killed. Sixth victim Tilden school.

fire dies.

#### JANUARY, 1890.

1.—Boys' Charity school, London, burned; 26 suffocated. \$300,000 fire in New York. Royal palace near Brussels burned, with invaluable art-gallery. 3000 cases influenza at-Copenhagen. Ram in Michigan, first on New York's fetter research. Year's for ten years.

2.-W. F. Sanders and T. C. Power elected Senators from Montana. News of massacre-of 30 Siberian exiles by Russian guards.

Terrible hurricanes at sea.

3.— Resignation of Spanish Ministry.
Antisdel House vacated, Detroit.
4.—Thermometer 35° below at Helena, Mont.

Heavy snows in California. Gardner, Ind.,

burned; loss, \$90,000. News of famine at

Flowers's Cove, N. F.

6.—Mail carrier frozen near Washington,
Cal. Filerta furniture factory burned, Detroit; loss, \$30,000. Collector Campau resigns.
7.—Michigan Exchange hotel, Detroit,
closed, after nearly 55 years' occupation.
8.—Furniture factory, Sandusky, burned;

\$100,000 loss.

9.—Bridge caisson sunk in Ohio at Louisville; 16 drowned. Wall of new Presbyterian church, Brooklyn, blew down; 2 killed, 7 hurt. Brazil proclaims religious equality and separation of church and state.

10.—Floods in Southern Illinois and Iowa. Two business blocks burn in Leamington, Ont.

Moody in Detroit.

11.—Deep snows in Upper Peninsula. Boiler explosion, Cincinnati; 9 injured. English ultimatum to Portugal.

ultimatum to Portugal.

12.—Heavy snow in New Mexico.
13.—Colorado Springa high school burned;
\$30,000 loss. \$500,000 fire in Baltimore. Controller Moloney resigns, Detroit, and Peter Rush appointed. Portuguese Cabinet resigns.
Tornado in parts of Ky., O., and Mo.; 18 killed.
14.—Tornado continues. E. R. Wilson reslected Senator from Maryland. New trials denied Cronin murderers, except Kunze. Republican Mayor in Detroit. Earthquake in Oerinthia, Austria.

15.—Calvin S. Brice elected Senator from Ohio.

Ohio.

16.—Six Indians hanged at Fort Smith, Ark. 17.—Accident on C., H. & D. R. R. near Cincinnati; 6 killed, 18 injured.

19.—Central school building, Coldwater,

burned; \$30,000 loss.

20.—New Spanish Cabinet formed.

21.—New Mt. Pleasant school-house burned;

\$8500 loss. Blizzard in State of Washington. Snow blockade Central Pacific R. R.

22.—Natural gas explosion, Pittsburg; 1 killed, 8 hurt. News of cholera ravages in

Mesopotamia.

23.—Annual show of Eastern Michigan Poultry and Pet Stock Association opens, De-

routry and ret Stock Association opens, Detroit. Gales and floods in England.

24.—National Non-partisan W. C. T. U. organized in Cleveland. Explosion of natural gas, Columbus, O.; 3 killed, 30 hurt. Earthquake at Bellfoot Lake, Tenn. Cadillac highschool burned; loss, \$13,000. 25.—Snow blockade Central Pacific broken.

Socialist Bill rejected by German Reichstag.

27.—Bunker Hill, Ind., burned. Accident on Monon Route near Indianapolis; 6 killed, 18 wounded. Myers' stable, Ishpeming, burned; \$43,000 loss. News of 3000 deaths from cholera at Khorassan, Persia.

31.—Detroit Evening Journal announces plan of testimonial to France for Revolutionary services. Packing-house burned, Kansas City; loss, \$300,000. Sail-boat crosses Straits from Cheboygan to Bois Blanc.

#### FEBRUARY.

1.—Mexico recognizes Republic of Brazil. Cave-in of old mines, Plains, Pa. McCarthy road-house, Hamtramck, burned.

2.—Sears building, Boston, burned, \$250,000 loss; also water-cure, etc., Kenosha, Wis., \$125,000; and five blocks at Danbury, Ct.,

\$300,000

3.—Sec'y Tracy's house burned, Washington; daughter suifocated, wife killed by jumping from window, French maid burned to death. Canadian Pacific car-house burned, Ottawa, Can.; loss, \$100,000. Freight train goes through bridge, Peoria, Ill.; 3 killed. Hon. Seth Low installed President of Columbia College, New York.

4.—Samoan treaty ratified by Senate.

Centennial of formation U. S. Supreme Court celebrated, New York City. Railroad bridge accident near Cascade Locks, Ore.; 10 killed, 15 hurt. Shipwreck near Nankin. China; 100 lost. Earthquake at Nagano, Japan. Report of 100 drowned by cloud-burst on Yang-tso-

Kiang river, China.

5.—Large fire in Portland, Me. Heavy robbery of Pacific Express Company. Chinese victory in Formosa. Flo ds in Oregon

and avalanche in Idaho.

6.—Colliery explosion, Abersychan, Wales; about 100 killed. Australian Federation Con-

ference in Melbourne.

7.—High winds and much damage in Western Pennsylvania and Northwestern States; earthquake in New Jersey; landslide in Oregon. Incipient coup d'état stopped in Paris; Duc d'Orleans arrested.

9.—Family of 6 and 2 others drowned through ice near Kingston, N. Y. Palace of Margaret of Navarre, Paris, burned.

10.—H. R. Newberry of Detroit appointed Secretary of Legation at Madrid, and Chas. E. Smith of Philadelphia Minister to Russia. Sioux Reservation ovened. S. Dakota. Anti-7.—High winds and much damage in West-

smith of Philadelphia Minister to Russia. Sioux Reservation opened, S. Dakota. Anti-Mormon victory at Sale Lake City election. 11.—New building M. E. Book Concern dedicated, N. Y. City. Swarms of "boomers" on Sioux Reservation. Mayor Pingree vetoes electric-lighting contract, Detroit. Parliament

opens.

12.—Gen. T. J. Morgan confirmed Indian 12.—Gen. T. J. Morgan commend induan Commissioner. Congress congratulates Re-public of Brazil. Duc d'Orleans sentenced to two years in prison. Lamoreaux seed-store burned, Grand Rapids; \$20,000 loss. 13.—Oklahoma Territorial bill passed. \$50,000 fire in Farwell Block, Chicago. Un-precedented snow-storm in Texas. Detroit

precedented snow-storm in Texas. Detroit high-school building entered by burglars; also

nigh-school building entered by burglars; also on 17th inst. News of death of Sultan of Zanzibar, and of defeat of Ras Aloula by King of Abyssinia.

14.—New rules of order adopted in Federal Ho. Reps. Toronto University building burned; \$500,000 loss. Newly wedded pair and 10 others drowned at Pontivy, France.

15.—City Treasurer Davis, Rochester, N. Y., defaults for \$60,000. Baltimore & Ohio R. R. collision near Bairdstown. O.: 8 brilled.

R. collision near Bairdstown, O.; 8 killed. 16.—Boulanger victories at Paris elections.

16.—Boulanger victories at Paris elections
Chapel of Thompson Presbyterian church,
Detroit, dedicated.
17.—Three Protestant evangelists mobbed
at Hull, Can. News of steamer Duburg lost in
China Ses; 400 drowned.
18.—Extradition treaty with England
ratified by Senate. Finest Mardi Gras pageant
known in New Orleans. Steamer Coral Queen
sunk by steamer Brisio off tyer Tees; if lost sunk by steamer Brisio off river Tees; 16 lost. Lockout of leather-workers in Massachusetts.

19.—Russia demands 8,000,000 rubles of 19.—Russia demands 3,000,000 rubles of Bulgaria, cost of military occupation. Colliery explosion near Decise, France; about 35 lost. Blizzard and severe cold in Northwest. 20.—Carnegie Library dedicated, Allegheny, Pa. Sixteen temperance crusaders arrested.

Spickardsville, Mo. Navassa rioters sentenced, Baltimore. Enormous Socialist gains in German elections. New town-house dedicated at Plymouth, Mich. 21.—News of great storms on Chinese coast.

22.—Dews of great storing of children and 22.—Dam near Prescott, Ariz., gives way: 50 lives and \$1,000,000 lost. Tobacco factor; burned, Richmond, Va.; \$250,000 loss. Heavy

snows in Sicily. 23.—Enforcement of Sunday law, Norwalk,

Holland Socialists arrested in Berlin. 24.—World's Fair contest settled in House of Representatives in favor of Chicago. Troubles in Oklahoma. Cupola of new concert hall at Hamburg fell; 5 killed, 8 hurt. 25.—Fifth-ward school house, Bay City, burned; \$5000 loss. Two doctors of Ky. School of Medicine indicted for grave-robbing. Destructive floods in O., Ky., and Ind.

26.—Pan-American Congress votes for inter-

national railway.

27.—Boise, first Democratic Governor of Iowa for 34 years, inaugurated. Blizzards out West. Railroad men accused for fatal acci-

dent in Kalamazoo acquitted.

24.—Ex-Congressman Taulbee of Ky. fatally shot by newspaper correspondent in Wash-ington. Hawes hanged at Birmingham, Ala., for murder of wife and 3 children. Labouchere suspended from House of Commons. Railroad accident, Ithaca, Mich.; 2 killed. Two feet of snow fell in Upper Peninsula.

1.-W. T. Harris, U. S. Com'r of Education, 1.—W. T. Harris, U. S. Com'r of Education, lectures in Detroit. Stevens residence, Ypsilanti, burns; loss, \$5000. Steamer Quetta sunk off Australian coast, with 120 lives.

2.—Pope Leo's 80th birthday. Blizzard in New England, with 18 inches snow; killing frost about Pensacola, Fla. \$100,000 fire in St. Joseph, Mo.

3.—First block of tin from American mine received at Pittsburg. Floods in Chamber.

received at Pittsburg. Floods in Cumber-land and Tennessee rivers.

of 4.—Senator Allison Iowa re-elected. 4.—Senator Anison of Town re-elected by Governor, pending investigation. Teller Pope, City National Bank, Louisville, runs away with \$60,000. \$300,000 fire in New York City.

6.—Lake Shore collision near Buffalo; 6

killed. 7.—Palacio chosen President of Venezuela. 8.—Imposing funeral of ex-Minister Pendle-

ton in Cincinnati. 9.-Fires: \$250,000 in factories burned in betroit; costly factory fires also in Cleveland; \$100,000 loss in Kansas City, Mo. Imperial mausoleum dedicated at Charlottenberg, Prussia.

10.—Amherstburg (Ont.) town hall burned; \$18,000 loss. Colliery explosion, Clamorganshire, Wales; 88 killed.

11.—Stern, Mayer & Co. clothing house, Cincinnati, burned; loss, \$500,000. Hungarian

Premier resigns.

12.—Louisiana lottery bill finally killed in North Dakota Legislature. Cyclone destroys Excelsior, Ark.; several hurt. Strike of 1000 iron-miners near Ashland, Wis. Influenza

rion-miners near Ashland, Wis. Influenza taking 70 a day at Teheran, Persia.

13.—Hocking Valley R. R. shops burned at Columbus, O. Government defeats in French Senate and British House of Commons. Webber S nitarium formally opened at Ionia. Seynoid Ali, brother of late Sultan, succeeds

to throne of Zanzibar. New Peruvian Cabinet. 14.—Bauerle woodwork factory, Petoskey, largest in world, burned; loss, \$100,000. San Francisco ordinance approved, requiring 60,000 Chinese to remove to south part of city.

French Ministry resigns.
15.—First fire in Chesaning for 20 years; loss, \$13,000. International Labor Conference, called by Emperor William, meets in Berlin. News of Afghan revolution, and defeat of rebels.

16.—New Hungarian and French Cabinets; Szapary and De Freycinet, Premiers. 100,000

English miners on strike.
17.—Rust saw mill burned, Bay City; loss, 17.—Kust saw mini ourned, day Chy, loss, \$50,000. Fire in newly timbered main shaft of West Vulcan mine, Norway, U. P.; \$250,000 loss. Bowen-Merrill Publishing Co. burned out, Indianapolis; 12 firemen killed, 16 wounded, \$150,000 loss. Bismarck and son Herbert resign. 30,000 striking dockmen parade in Liverpool.

18.—Bismarck's resignation accepted; Prussian Ministry resigns. Immense breaks in Lower Mississippi levees. 19.—Plummer & Co., New York dry-goods dealers, fail for \$1,000,000. Von Caprivi

dealers, fail for \$1,000,000. Von Caprivi succeeds Bismarck as Chancellor of German

Empire; Prusslan Ministry reconstructed.

20.—Blair education bill finally defeated in the Senate. N. Y. Court of Appeals affirms constitutionality of execution by electricity. Panic reported in Switzerland, from fear of avalanches.

21.—Fire in Elk Rapids chemical works; loss, \$30,000. Bismarck refuses title and

decoration from Emperor.

22.—Four suicides in Chicago. Political student riot in St. Petersburg; 500 arrested. student riot in St. Petersburg; 500 arrested. Steamer Gwendoline foundered off British coast; 7 drowned. Cyclones do great damage in South Carolina. British steamer Virent abandoned at sea; 15 lost.

23.—Botanical laboratory State Agricultural College, Lansing, burned; loss, \$10,000. Great flood in Ohio river.

24.—Prairie fires near Wichita, Ks., cause \$100.000 loss. Hotel burned, Kearney, Neb.;

\$100,000 loss. Hotel burned, Kearney, Neb.; 1 life and \$150,000 loss.

25.—Accident on Northern Pacific: 1 killed.

25.—Accused on Postage and States, burned; \$15,000 loss. \$50,000 elevator fire at Kansas City, Mo.
27.—Tornado in Kentucky and other States;

a 1.—10rnado in Kentucky and other States; parts of Louisville wrecked, 120 lives lost, 300 hurt, 400 buildings ruined, loss \$2,000,000. Metropolis, Ill, destroyed, with much loss of life and property. Earthquake in New Hampshire.

29.—Maryland State Treasurer defaults for \$150,000. Berlin Labor Conference ends.

30 .- Government party carries Portuguese elections.

31.-St. John's convent burned, Milwaukee; loss, \$70,000. Greenville, Miss., for first time reached by flood.

#### APRIL.

1.-Six boys killed by sand caving near

Vernon, Texas.

Vernon, Texas.

2.—New Portuguese Cabinet. Pan-American Congress unanimously adopts resolution for international coinage. Coal-mine explosion at Wilkesbarre, Pa.; 8 killed, 6 hurt. Edw. H. Harvey appointed Pension Agent at Detroit. Loud planing mill, Oscoda, burned;

Joss, \$15,000.

3.—Plumbers' strike in Chicago. Greeley homestead, Chappaqua, N. Y., burned. Col. H. M. Duffield elected Commander Michigan

G. A. R. Fire at Ithaca, Mich.; \$4400 loss.

4.—Gas explosions in oil-tunnel near Santa
Paula, Cal.; 6 killed. Flood in lower Miss-

issippi.

5.—Lewis A. Grant of Minn. made Assistant Sec'y of War, and Gen. Miles promoted to Major-General, vice Crook, deceased. Business part of Theresa, N. Y., burned; \$200,000 loss. Twelve negroes drowned from raft near Vicksburg, Miss. News of terrible hurricanes on the Pacific.

6.—Confederate Decoration Day.
7.—Carpenters' and bricklayers' strike in hicago. Sistare & Sons, New York and De-

Chicago. Sistare & Sons, New York and Detroit brokers, fail for large sum.

8.—Wind-storms in Michigan, Ohio, and Indiana; much damage at Kalamazoo, of life in Ohio, and

Charlotte, and elsewhere; some loss of life in other States. Strikers' riot in Vienna.

9.—U. S. Rolling-stock Co. burned out at Decatur, Ala.; loss, \$200.000. Liberty of press, etc., proclaimed in Brazil. Four murdeways barned in Brazil. derers hanged in Pennsylvania.

10 .- Anti-Carlist demonstration in Madrid.

11.-More disturbances in Vienna. Slight earthquake at Dover, N. H.

21.—Samoan treaty signed in Berlin. First cable-car line opened in Washington.
13.—Fire in Plankinton Hotel, Detroit; 1984, \$132,000. Steamer on Saginaw river strikes bridge and loses upper works; 8 drowned.
Col. Bermudez elected President of Peru.

14.—Strike of carpenters at Indianapolis; formidable strikes abroad. Northern Pacific

chops, Ellensburg, Wash., burned; loss, \$100,000.

15.—News of unsuccessful revolution in Afghanistan. Lockout at coke-ovens, Scott-dale, Pa.; 1200 idle. Bousfield wooden-ware

works, Bay City, burned; loss, \$130,000

16.—Most building trades out in Chicago.
Roof of weaving-mill falls, Bergamo, Italy;

Roof of weaving-mill falls, Bergamo, Italy; 17 girls killed.

17. Gas employees strike in Chicago.

18.—Last day of Castle Garden as immigrant station. Hebard saw-mill burned, Pequaming, U. P., loss \$50,000, and Thompson Handle Co.'s factory, Kalkaska, \$20,000.

19.—Pan-American Congress adjo arms.

20.—Dedication of \$30,000 M. E. church, Lansing.

Lansing.

21.—Riots between tropps and strikers. Troppeau, East Silesia, Harrodsburg, Ky., burned; \$150,000 loss. Deaconesses Home dedicated, Detroit. \$40,000 fire at Charlotte. News of wreck of steamer Bilboa in North

Rews of the Sea; 15 lost.

22.—Opening of Detroit Floral and Musical Charity Festival, for four days' exhibit—a grand success. Mine explosion, Rock Springs,

grand success. Mine explosion, Rock Springs, Wyo.; 30 killed.

23.—Business quarter Greenwood. Miss., burned; \$124,000 loss. \$200,000 fire in Rochester, N. Y. News of battle between French and Dahmiaus; 50 French wounded, 500 Dahomians killed.

24.—Earthquake in San Francisco and other parts of California. Five sisters suicide in Moscow; fear of arrest as Nihilists. Crisis in Brazilian Cabinet.

25.—President approves World's Fair bill. 26.—Ocean steamer Oneida wrecked on Lanch Island; 77 lost. Great labor demonstration in Montreal.

27.—Stanley welcomed in London.
28.—U. S. Supreme Court declares unconstitutional State laws directing seizure of liquors in original packages. Chicagostrikers digions in original packages. Chicagostrikers becoming riotous. Arbitration treaty signed between United States, Central American States, Bolivia, Ecuador, Hayti, and Brazil.

29.—Twelve Anarchists arrested in Paris.
30.—Battle of police and workingmen at great labor meeting near The Hague.

#### MAY.

1.-Labor demonstrations in Detroit and many cities; general carpenters' strike here and elsewhere; four-mile procession in Chicago, 10,000 in Louisville parade. Bold diamond robbery in Cincinnati; \$5000 worth stolen.

2.—International copyright bill defeated in House. More strikes in Chicago. Strikers'

riots abroad.

S.—Sash, blind, and door-men strike. :Seventy-eight temperance crusaders arrested

in Lathrop, Mo.
4.—Great labor parade in London; 150,000 men in line. Strike of building trades ends in Ottawa, Can. Business part of Gilboa, N. Y., burned; \$150,000 loss. Government triumph in elections for Paris Municipal Council.

6.—Insane asylum burned near Montreal; ver 100 lost. Jos. Gingrass killed by lectricity, Detroit. Cyclone in Hood Co.,

electricity, Detroit. Cyclone in Hood Co., Texas; 12 killed. 7.—Fires: Singer Sewing machine Factory, Elizabeth, N. J.; poor house at Preston, N. Y.,

25 lives lost; Saranac, Mich., \$12,000; winding-house Abraham colliery, London, 850 miners entombed.

8.-G.o. W. Steele appointed Governor of

Oklahoma.

9.—Steamship takes first load of corn from Galveston for Liverpool direct. Poor-house and insane asylum near Utica, N. Y., burned; loss, 13 lives. Use of Russian language in Finland schools made compulsory.

10.—Cloud-burst and cyclone at Akron. O.; 100 houses destroyed. Slave-ship and Slave-ship and slave-cargo captured off African coast by

British steamer. 12.-Strike of 4000 tube-workers at McKees-

port. Pa. 13.—Factory explosion Avigliana, Italy; 14 killed.

-Chas. H. Smith, prominent business

14.—Chas. H. Silitti, prominess outsiness man, Detroit, disappears.
15.—Flood at Kalamazoo. Explosion in Hartford mine, Ashley. Pa.; 29 killed.
16.—New Japanese Cabinet. News of burning of Tomsk, Siberia, with great loss of life. Ferry boat capsized near Ratibor, Silesia; 86 drowned. John G. Carlisle elected Senator

from Kentucky.

17.—Diggins mill-yard burned, Cadillac;
\$20,000 loss. Fire and explosion at Havana,

Cuba; 36 killed.

21.—Five miners killed by falling rocks in Calumet and Hecla mine. Tariff Bill passes the House.

22.—News of insurrection at Puerto Alegre, Brazil; 26 killed.
25.—Row-boat upset at Fall River, Mass.;

8 drowned. 26.—Great storms and floods in Germany; 17 lost.

27.--Student-circus riot at Ann John W. Davis. Dem., elected by Legislature Governor of Rhode Island.

28.—River and Harbor Bill passes House. 29.—Kepler flouring-mill burned, St. Louis;

\$150,000 loss.

30.—Railroad accident, Oakland, Cal.; 13 kill-d. Garfield Memorial dedicated, Cleveland. Spring Palace, Fort Worth, Texas, burned. Corner-stone of Memorial Arch laid, New York City.

#### JUNE.

Eleventh Census begun.

3.—Bradshaw, Neb., destroyed by cyclone; 15 killed. Earthquake in Lima, Peru. Tresty signed to suppress anarchy in Germany, France, Russia, and Switzerland. Duc d'Orleans pardoned, but conducted to the frontier.

4.—Sylvester Pennoyer, Dem., re-elected Governor of Oregon. Powder-house explosion near Mansfield, O. Street-car strike in Co-

lumbus, O.
5.—House of Commons rejects the Channel

tunnel bill.

6.—Sleeping car near Louisville goes down 6.—Sleeping car near Louisvini 30-foot embankment; many injured. Rail-road accident near Rockford, Ill.; 5 killed. Poland.

8.—Mail robbery on North Dakota train. \$90.000 fire at Chatworth, III. Cable-cars collide in Chicago; 5 hurt. Boat capsized in Boston harbor; 7 drowned.

9.—Collision on Wabash R. R., Warrenton, Mo.; 7 killed.
10.—Theatre fire in Brooklyn, N. Y.; \$60.000 loss. House of Lords defeats bill allowing

women to serve on London City Council.

11.—News of burning of Ufaleisk New-jansk, in Ural Mountains, Russia; 40 lives lost.

14.—Louis Philippe declared heir to throne of Portugal.

16.—Explosion Hill Farm mines, near Dunbar, Pa.; 30 killed. 18.—Mrs. Hannah Bradley killed by runaway team on Jefferson avenue, Detroit.

Stanley re-appointed by King of Belgium
Governor of Congo Free State, from 1891.

22.—Revolution in San Salvador; leader
and 22 others killed; President Menendez.

dies of heart disease next day; Gen. Ezeta Provisional President.

23.—New Constitution of Brazil promulgat

ed. Fort de France, Martinique, burned; 5000 homeless, \$3,000,000 loss. 27.—Ex-Senator T. W. Palmer elected President of World's Fair Commission. Dutch steamer sunk by collision in Bay of Biscay; 6 lost.

29.—Accident on Mo. Pacific R. R. near Nevada. Mo.; many injured, 2 fatally. 30.—Fire in Standard Oil refinery, Louis-ville; 7 hurt, 3 fatally.

#### JULY.

1.—Disastrous fire at Seattle, Wash.
2.—Haverhill, Mass., celebrates 250th anniversary. Peabody Institute, Danvers, Mass., burned; loss, \$75,000.
3.—President signs bill admitting Idaho.

Spanish Ministry resigns.

4.-New Spanish Cabinet; Del Castillo, Premier.

6.—Dedication of First Reformed (Zion) church, Detroit. Large fire, East Tawas.
7.—Gale at Fargo, N. D.; 9 killed, many

hurt. 9.-Roseville, N. Y., burned. Heavy winds

at Cleveland; four electric masts blown down. 10.—President signs bill admitting Wyoming. Business part of Ithaca, Mich, burned. \$30,000 loss; also Globs tobacco work. Cincinnati, \$130,000. News of drowning of 59 persons during launch of vessel at Osaka, Japan, and killing of 700 by hurricanes in Arabia.

11.—Explosion on steamer Tioga in Chicago river; 36 killed and injured. Riot at Griffin, (3a.; 18 killed and wounded.

12.—Marriage of Henry M. Stanl. y and Miss Dorothy Tennant in Westminster Abbey. 2000 houses burned in Constantinople.

13.-Intense heat in nearly all parts of the country. Cyclone in Minnesota; steamer sunk near St. Paul, 100 lives lost, \$600,000 fire

in Philadelphia

in Philadelphia.

14.—Free-coinage bill signed by President.
Explosion of King's powder-mills near Cincinnati; 10 killed, many hurt. Yellow fever in Havana. 105th anniversary of fall of Bastile celebrated in Paris. San Salvador proclaimed in state of siege.

15.—\$1,000,000 fire in Minneapolis.

16.—Battle between troops of San Salvador and Cuetamala. Letter defeated.

and Guatemals; latter defeated.

17.—Col. O. L. Spaul-ling appointed Asst.
Sec'y of the Treasury. Steamers City of Detroit and Kesota collide near Detroit; latter sunk, \$150,000 loss.

18.—Cupola bursts in New York foundry;
16 men burned with red-hot metal.
19.—Fire in Western Union Telegraph offices, New York City; loss, \$100.000.
21.—Slomni, Russia, partly destroyed by hurricane; 19 killed.

22.—Destructive cyclone in and about

Fargo, N. D.

23.—State militia encampment begins at Battle Creek. Fire-damp explosion, St. Etienne, France; 98 killed, 35 wounded.

24.—Two battles between San Salvadorians

and Guatemalans; former defeated. American schooner Wm. Rice sinks on voyage from Cape Ann to Ireland; 16 lost. Tornado South Lawrence, Mass.; several killed.

27.—Wallace, Idaho, burned; 1500 people homeless, \$150,000 loss. Revolution in Buenos Ayres against Argentine Republic; over 1000 killed, 5000 wounded.

28.—Street-car employees strike in Grand 28.—Street-ear employees strike in Grand Rapids. Unsuccessful revolution in San Salvador. Riot in Armenian Cathedral, Constantinople. Monitor plow-works burned, Minneapolis; loss, \$150,000. 29.—Excursion steamers collide near Balti-

more; great loss of life. Central-American war ends.

30.—Fire-damp explosion near Paris, France; 120 killed. Four firemen injured in Chicago fire. Business center Seneca Falls, N. Y., burned.
31.—State Conventions of Prohibition and

Union Labor parties at Lansing.

#### AUGUST.

1.—P. O. Department excludes Tolstoi's "Kroutzer Sonata" from the mails. Famine in the Soudan; 100 dying daily. 2.-Col. Bermudez proclaimed President of

Peru. 3.-Revolutionists defeated in San Salvador;

Gen. Rivas shot.

4.—Great fire in Louisville; 25,000 bbls. of whisky burned; loss, \$800,000. News of cholera at Mecca; deaths, 500 a day. Great wind and heil-storms in Minnesota and South Dakota. What Cheer, Iowa, burned; \$100,000

5.—Great Anti-Mormon victory at Utah elections. French and English treaty, giving latter protectorate over Zanzibar. Execution

attriprotectorate over Zanzoar. Execution by electricity of the murderer Kemmler, in Auburn State prison, N. Y.

6.—Corner-stone of Utah University laid at Ogden by Bishop J. H. Vincent. Thos. G. Jones, Den., elected Governor of Alabama.

7.—President Celman of Argentine Republic resigns, and Pellegrini succeeds.

8.—Congressional "original package" bill approved by President. Strike of Knights of Labor on N. Y. Central R. R.

12.—National Encampment G. A. R.,

Boston; 40,000 veterans parade.

13.—New silver law takes effect. Bellaire,
0. goblet-works burn; \$50,000 loss. Great
whisky and distill-ry fire in Louisville; \$1,000,-000 loss

000 loss.

14.—Storm at Colorado Springs causes much loss of life and property.

15.—Anti-lottery bill passes the House. Explosion Government powder-mills at Canton, China; 1000 killed, 200 houses destroyed.

17.—Robbery of express train near Sedalia, Mo.; \$30,000 taken. Riot on train near Cincinnati; 6 killed. Dedication of soldiers' memorial tablet at State Normal school, Vosilonii Ypsilanti. 18.—Railroad accident near Trinidad, Colo.:

18.—Rairroad accident near rimana, coo., filled, 14 wounded. Parliament prorogued.
19.—Accident on Old Colony R. R., near Boston; 15 killed, 25 hurt. Cyclone at Wilkesbarre, Pa., kills 15 persons, wounds 200.
21.—Great storm in Philadelphia. Fred W.

Crimmins, reporter, shot and dangerously wounded by Italian fruit-vender, Detroit.

22.—Railroad accidents at Cascade, Cal.,

Lyons, Colo., and near Reading, Pa., kill 3, 8,

and 4 persons respectively.

24.—Theatre riot at Huntington, W. Va.; 1 killed.

26.-Exposition opens, Detroit. mercial treaty between Turkey and Germany. Tokay, Hungary, burned; 1000 families home-

27.—Knights of Labor boycott 100,000 brick-moulders, New York City.
28.—Republican State Convention in Detroit. Treaty of peace between San Salvador and Guatemala. Keneshma, Russia, burned;

loss, 3,000,000 rubles.

29.—Gen. Barrundia shot by Guatemalan soldiers on U. S. vessel at San Jose, Gua. Dr. 30.—Kropowski, Russia, burned.
31.—40,000 men in labor parade, Melbourne,

Aus. Six incendiary fires in Phila lelphia.

#### SEPTEMBER.

1.-Mine explosion Boryslav, Austria; 80

killed.

killed.

2.—C. S. Page, Rep., elected Governor of Yt.; Jas. P. Eagle, Dem., Gov. of Arkansas. Schwarz building falls, New Orleans; 10 killed. Steamer Portuense founders in the West Indies; 10 drowned. 6000 carpenters out in Chicago. Train robbery near Mobile.

4.—Fire in Salonica, Turkey; 12,000 houses and most public buildings burned. Fall of bridge at Prague drowns 30. State Democratic Convention in Lansing.

5.—Detroit Exposition closes its second successful exhibit. Dynamite explosion La Rochelle, France, kills 10.

successful exhibit. Dyn Rochelle, France, kills 10.

6.—Railroad accident Adobe, Colo.; 5 killed. Blast explosion, Spokane Falls, kills 18. Floods in Bohemia; 45,000 homeless.

8.—Edw. C. Burleigh, Rep., re-elected Governor of Maine.

State Democratic Convention at Lansing.

Marshall has a \$100,000 fire.

Warner, Rep., elected 11.—Francis E.

Governor of Wyoming.

13.—Triple Alliance (Germany, Austria, Italy) extended to 1897. Great floods in New York and Ohio, and killing frosts in Iowa and westward.

14.—News of floods and cholera in China.
16.—Alhambra, Spain, partly burned. Mine explosion in Rhenish Prussia; 26 killed.
17.—New York Central R. R. strike de-

clared off.

clared off.

19.—President signs Anti-lottery bill.

Fires: Business part of Whitehall, \$100,000 loss; 11 buildings, South Haven, \$70,000. J. D. Rockefeller gives \$100,000 more to Baptist University in Chicago. Wreck on Reading R. R.; about 50 killed. News of loss of Osman Ghazi and Ali Pasha on Japanese steamer.

20.—Graelay status unveiled in front of

20.—Greeley statue unveiled in front of Tribune building, New York City.
21.—Election riot at Gos, India; 17 killed.
22.—Col. Eugene Robinson appointed Brig-

adier-General of Michigan troops.

23.—Nine shocks of earthquake at Columbia.

24.—Corner-stone laid of Disciple church, Cass Park, Detroit. \$3700 fire at Saginaw. Great floods in France.

26.—Incendiary fire at Frankfort, Mich.; \$11,000 loss. E. Burd Grubb of N. J. nominated to succeed Minister Palmer in Spain, and Edwin H. Conger of Iows Minister to Brazil.

28.—Ex-Governor Felch 86 years old. Rail-road accident, Pleasant Valley, Pa.; 9 killed, many hurt. Fower Bros. packing-house burned, Chicago; loss, \$690,000. 29.—Another attempt upon the Czar's life. 30.—Tariff bill passes Senate. \$250,000 fire

in Chicago.

#### OCTOBER.

1.—Congress adjourns. President signs Tariff bill.

2.-Republican victory in Idaho; 2000 majority.

3.—George Bancroft 90 years old. excitement in Oklahoma over location of

6.—Tariff law takes effect. German Day in many cities; brilliant parade in Detroit.
7.—Explosion of Dupont powder-mills, near

Wilmington, Del.; 11 killed, 20 hurt, great loss of property. Destructive prairie fires in South Dakota.

8.—Trial of Ald. Tierney, Detroit, for bribery, begins. Boiler explosion in saw-mill, Muskegon; 6 injured, 1 fatally. Great parade of Federal and Confederate soldiers, Knoxville, Tenn.

9.—O'Brien and Dillon escape. Explosion Pyrotechnic school, Bourges, France; 5

killed, 40 injured. 10.—Michigan Supreme Court decides local

option law constitutional.

12.—Sands's shingle-mill and salt-block burned, Manistee; \$100,000 loss. Dillon and O'Brien land in France. 13.—Dedication of Hackley Public Library,

Muskegon; address by ex-Senator Palmer. muskegon; address by ex-Sehator Falmer.

15.—Detroit Journal military prize-drill,
Detroit Leland Hotel burned, Syracuse,
N.Y.; 4 lives and \$200,000 lost.

16.—Wm. Moore fatally shot while beating
wife, by Patrolman O'Donnell, Detroit. Fail-

\$2,500,000. 17.—Shops of Tennessee penitentiary burn; \$275,000 loss.

18.—First Republican victory at Tacoma.

Wash.

19.—First locomotive to the top of Pike's Peak. Liberal triumphs in Belgian elections.
20.—Steamer Annie Young burns off Lex-

ington, Mich.; 9 lives lost.

21.—News of three American locomotives landed at Jaffa (old Joppa), for railway to Jerusalem.

22.—Three fatal railroad collisions. Successful test of telephone Erie to New York, 500 miles. Dr. Brodie memorial meeting in Detroit.

23.—Jury disagree on Tierney trial. Earth-

quake at Cape Girardeau, Mo.

25.—Municipal Improvement Association formed, Detroit. Fire in Canton, China; 100 houses burned.

ones, burned.

26.—124th anniversary John-street M. E. church, New York City. Fire in Mobile; loss, \$800,000. St. Joseph's (Catholic) church dedicated Port Huron. Von Molke 90 years old.

27.—Government defeats in Greek elections.

28.—\$200,000 fire at Eureka Springs, Ark.; \$100,000 loss, Eureka Junction, Wash. Alcona county poor-house burned; \$5000 loss.

29.—Last day of mission in Casino Tabernacle, Detroit. Oscar Woolfolk, murderer of his family of 9, executed at Perry, Ga. Political troubles in Canton of Ticino, Switz.

30.—First day of Central Gospel Mission, Detroit. Speaker Reed in Detroit, addresses great Republican rally. Steamer Viscaya and schooner Hargreaves collide and sink off Barnegat; 67 drowned. Dutch Parliament declares king incapable of reigning. Population of United States announced as 62,480,540.

31.—Chilicothe, Ill., mostly burned; loss, \$200,000.

#### NOVEMBER.

1.—Corner-stone laid of great W. C. T. U.

Temple, Chicago.

2.—Dillon and O'Brien land in New York. Government powder-mills blow up at Tai Ping Foo, China; 300 killed, and all houses near wrecked.

3.—Two San Francisco hotels burned; loss, over \$250,000. \$75,000 fire in Philadelphia. Two Chinese men-of war founder in gale; 500 lost. 26,000 cholera deaths reported from China.

4.—General elections in the United States: Democratic victories in nearly all parts. New iron steamer Reynolds, on fire, beached near Colchester, Ont., and becomes a wreck.

5.—Bliss saw-mill burned, Saginaw; \$30,000

6.—H. M. Stanley and wife arrive in New York. Fires at Buffalo, \$250,000 loss; Phil-adelphia, \$185,000; Truckee, Cal., \$110,000. 7.—Fire at Owensboro. Ky.; \$150,000 and C. A. Guernsey of Grand Rapids lost. Winslow,

Ind., burned.

8.—Pr. sident proclaims Thanksgiving Day.
9.—Unitarians occupy new church corner
Woodward avenue and Edmund Place, Dewoodward avenue and Edmund Place, De-troit. Unsucc ssful revolt at the capital of Honduras. Train overturned at Okayan, Japan; 26 kill-d and wounded. 10.—Masonic Fair opened, Grand Rapids. British torpedo cruis-r wrecked off Cape Finisterre: 173 lost. Steamer Ocean Wave

sunk on Lake Untario.

11.—Chrysanthemum show opened, Detroit. Gov. Luce appoints l'hanksgiving D.y. Great financial flurry in Wall street, New York. Railway accident near Taunton, Eng.;

10 killed.

10 killed.

12.—Ferry-boat capsized near Biarritz, France; 55 drowned. Car-shed and stables burned, Stoux Falls, 8. D.; 9 horses and \$25,000 loss. Train goes through treatie near Salem, Ore; 5 killed. Student-citizen riot at Ann Arbor; 1 killed.

14.—Birchall hanged at Woodstock, Ont. R. R. collision near Florence, P.1.; 2 killed, 16 hurt. Another on B. & O. R. R., killing 2. Dynamite explosion near Lima, O., kills 4 and wounds 4. Baring Bros. the great London

Dynamite explosion near Lima, O., kills 4 and wounds 4. Baring Bros., the great London bankers, in financial straits.

15.—People's Savings Bank organized, Grand Raputs. Jackson Morning Patriot solit. Train derailed near Salonica, Turkey; 30 killed, 40 hurt. Comet found by Prof. Zona.

16.—Treaty of peace signed between San Salvador and Guatemala. Alarm of Indian morising in No-th Dakota. Church riot in B. Fritz, Transylvania; 6 killed, 16 hurt.

17.—Freight train goes through bridge into Kaw river at Kansas City; 12 drown. Albert A. Smith, New York broker, proves forger for \$350,000. Boiler explosion at Reading, Pa.; 3 killed.

18.—Gov. F. E. Warren elected Senator from Wyoming. Launch of U. S. cruiser Maine, at

Wyoming. Launch of U. S. C. Brooklyn Navy Yard. 19.—Gen. John B. Gordon elected Senator Livery stable burned, Evanfrom Georgia. Livery stable burned, Evan-ston, Ill.; 17 horses and \$40,000 lost. New Holland church dedicated at Grand Rapids. \$100,000 robbery in Chicago.

21.—H. M. Dubois shot and killed at High-land Park by Henry Hull.

22 .- New brick building at Jersey City falls; many injured, some fatally. 23.-Indian troubles thickening in the

Northwest; much movement of troops. 24.—Five ice-houses burned near Cadillac;

loss, \$35,000.

25.—Parliament meets. Financial crisis in

Buenos Ayres.
26.—Fire in Allan foundry, Detroit; \$10,000 Battle between Indians and troops near Fort Keogh, Mont. Riot at Mannington, W. rort Meogn, Mont. Riot at Mannington, W. Va.; 2 kirled. Forty fishing-boats sunk off coast of Norway; 23 lives lost.

27.—Fire in Evening Sun office, Detroit; loss, \$10,000. Fall of grand stand, Brooklyn, N. Y.; 50 injured.

N. Y.; 50 injured.

28.—Stanley lectures in Detroit. Senator Pugh of Alabama re-elected. \$100,000 dwelling burned, Newton, Ct. Jamison & Co., large Philadelphia brokers, assign. Earthquake in Danube valuey.

30 .- Indian scare in Minnesota. Jeffersonbarracks stables burned, St. Louis, with 66 horses and nules; loss, \$16,000. Unitarian church dedicated, Detroit. Public debt in-

creased this month \$9,130,819.51; cash in Federal treasury, \$675,860,186.82.

#### DECEMBER.

1.—Congress meets. Potts Salt & Lumber Co., Detr-it, assign. Report of frost and snow on Mediterranean shores, first in 20 years; heavy snows in Spain \$300,000 file at Manayunk, Pa. Explosion of powder-house at Guttiric, O. T.; none killed.

2.—Annual meetings State S. S. Convention Lansing and State Horticultural Section to

in Lansing and State Horticultural Society in Kalamazoo. Ellis Miller, murderer, hanged

in Ohio penitentiary.

3.-Great five in Scotten tobacco factory. Detroit, 2 firemen killed, 4 hurt, loss \$250,000, insurance \$107.00. Sev-n engines and other property C. & W. M. R. R. burned at Holland. Mich.; loss, \$25,000. Copyright bill passes House.

4. - Fall of blast-furnace Joliet, Ill.; 9 killed, 6 dang-rously hurt. Tank explosion in Circinnati; 3 fatally injured. Falure for \$1,000,000 of Revis, Eussell & Co., London, and for \$800. 000 of the Rittenhouse woolen factory at

000 of the Rittenhouss woolen factory at Passaic, N. J.

5.—Four business blocks burned at Pittsburg; loss, \$2.000. Sage Lumber Co. Albany, N. Y., windled of near \$100.000 by book-keeper, who suicides. Taylor House, etc., burned at Siginaw; loss, \$13,500. Fire at Newayro. \$2000 loss. Sharp shocks of earthogake at Lockwood, Mo.

6. Feathering Regents his Language.

6.—Frederick Steams presents his Japanese collection to Detroit Art Museum. Disappearance of Lewis D. S. nborn, Saginaw: financial difficulties. Collis on near New York of oceansteamers La Cham, agne and Lisbonese; none lost. Harrington, chief of Irish National Land League, in Detroit. Shipload of Chinese sent back from San Francisco.

7.—Tenth National Convention Federation of Labor opens, Detroit. Rust House burned, Farwell, Mich. Fire at Three Rivers. Block burned, Anderson, Ind.; \$38.00. loss. Boulangist candidate elected to Paris Municipal

Council.

8. -National Protective Association of Re-8.—National Protective Association of Retail Clerks formed, Detroit. Kermes opens. Two heavy failures in New York City. Will filed in New York of Dan'l B. Fayerweather, giving \$2,100,000 to 19 colleges and one theological school. Oklahoma settlers suffering. Grand Central depot, Chicago, dedicated. Evansville, Ind., foundrymen fail for \$100,000. Cyclone near Monroe, Ga.; immense damage, nearly killed.

many killed.

9.—Thermometer 30° below at Lydonville,
Vt. James Crosbie shoots and kills Matthew O'Shea, Bay City. Eben E. Rexford's dwelling burned, Appleton, Wis. Democratic Mayor elected in Boston. \$700.000 and \$200.000 failures in Boston; \$192,000 failure, San

Francisco.

10.-Linseed-oil works burned, San Francisco; loss, \$200,000. Albert Baldwin killed by accident at Port Huron tunnel.

11.—Col. J. L. M. Irby elected as Farmers' Alliance candidate to U.S. Senate from South Carolina. \$75,000 fire in New York. Ex-State Senator Arnold shoots himself at Unadilla, N. Y., for defeat at late elections.

r., for deteat at lite elections. Second Reformed church dedicated, Grand Haven.

12.—Prince Lubesicky's porcelain factory near War aw burned; 8 killed. Building blown down, Brooklyn, N. Y.; dwelling crushed and girl killed.

ed and grirkmed.

13.—Saw-mill near Big Rapids blew up; 2 killed, 3 hurt. Dorrance Building burned. Providence, R. I.; 2 fremen injured. Party struck by locomotive, Bristol, Pa.; 4 killed, 2 wounded. Fire in Buchtel College, Akron, O.; 2 young ladies burned to death, 8 seriously.

14.—John Corrigan aged 14, accidentally and fatally shoots Willie Paige, boy of 10, Detroit. Central school building burned, Muskegon; loes, \$75,000. Dardanelles and Monticeilo. Ark, burned; loss, \$150,000.

15.—t'asino building, Detroit, leased to Wonderland, and re-leased for city mission. Sitting Buil and 11 others killed, in attempt by Indian police to arrest him. Annual exhibit Mich. Poultry Association opens, Battle Creek. Lorillard Brick Co., New York and Keyport, N. J., fail for \$1,000,000. Giant-powder explosion near Wakefield, U. P.; 2 killed, 3 miured. killed, 8 injured.

killed, 3 injured.

16.—Livery stable burned with 6 horses and 185 bales of cotton, Luling, Tex. Burton Block burned, Chicago; loss, \$20,000. Five persons swept by high wind from Alpine height over pre-ipice and killed. Three priests drowned through ice at Grenoble, Switz.

17.—Heavy snows in Western Pennsylvania and other States; business practically suspended in Pittsburg. Senator Gorman's dwelling burned, Laurel, Md. Colliery accident at Hornu, Belgium; 18 killed. Floods on Vancouver Island, B. C.; \$50,000 loss. Fire in Ninde M. E. church, Detroit; small damage. Roof of machine-works, Roanoke, Va., fell under weight of snow; 1 killed, 8 injured, less \$100,000.

ing of railroads. Two murderers hanged at Columbus, and one at Welland, Ont. 8. A. Kean, Chicago banker, fails. Active Indian hostilities in Colorado. Holland, Mich., first lighted by electricity. Fire at Waycross, Ga.; loes. \$80,000.

loss, \$60,000.

19.—La Montagne, murderer, hanged at Sherbrooke, Que.; sheriff died from excitement. Four Indian murderers hanged at Missoula, Mont. Accident on Wheeling & Lake Erie R. R. at Bolivar, O.; 6 killed, many burt. Another on Intercol-nial R. R., 8t. Joseph's, Que.; 6 killed, 60 injured. Kolb shoothouse, West Bay City, dedicated. Five laborers drowned by coal-slide on wharf, Ilailfax, N. S. Snow-storm throughout Great Britain.

20.—Car-heater explodes on C. & G. T. R. R., Battle Creek; 9 receive burns or otherwise hurt. Signor Succi, New York City, ends 45-day fast. Eyraud and Gabrielle Gompard convicted of strangling Notary Gruffe, Paris. 21.—M. E. church dedicated, Howell. St.

21.—M. E. church dedicated, Howell. St. Casimir (Polish) Catholic church dedicated, Detroit. Thermometer 22° below at Saranac Lake, N. Y. Fires: Grace Episcopal church, Detroit, \$1000 damage: St. Barnard's Catholic church, New York, \$75,000 loss; propeller Missouri, near Sandwich, Ont., insured for \$7000.
22.—State Teachers' Association meets in Grand Rapids. Castno roller-rink hurned. 18.—Gov. Geo. L. Shoup and W. J. Mc-Connell elected Senators from Idaho for short terms; Fred T. Dubois for full term 189-17. Great snow-storms continue in Atlantic and Southern States; immense damage and block-

# THE UNITED STATES.

#### The Federal Government.

EXECUTIVE DEPARTMENT.

EXECUTIVE DFPARTMENT.

President—Benjamin Harrison, of Indiana.
Salary, \$50,000 a year.

Vice-President—Levi P. Mobton, of New
York. Salary, \$10,000.
Secretary of State—James G. Blaine, of
Maine. Salary, \$800.
Secretary of the Treasury—William Windon, of Minnesota. Salary, \$800.
Secretary of War—Redfield Proctor, of
Vermont. Salary, \$800.
Secretary of War—Redfield Proctor, of
New York. Salary, \$900.
Secretary of the Interior—John W. Noble,
of dissout. Salary, \$900.
Secretary of Agriculture—Jeremiah M.
Rysk, of Wisconshin. Salary, \$900.

of dissour.

Secretary of Agriculture—Jerbana.

Rusk, of Wisconsin. Salary, \$8000.

Postmaster-General—John Wanamaker, of

Pennsylvania. Salary, \$800.

Attorney-General—W. H. H. Miller, of In-

diana. Salary, \$8000.

Commissioner of the General Land Office-LEWIS A. GROFF, of Kansas. Salary, \$4000.

LEWIS A. GROFF, of Kairsis. Salary, \$4000.

Commissioner of Palents—Chaules E.

MUCHELL, of Connecticut Salary, \$4500

Commissioner of Pensions—Green B. Raum,
of Illinois. S. Jary, \$5000.

Commissioner of Indian Affairs—Thomas
J. Mosgan, of Rhod - Island. Salary, \$4000.

Commissioner of Education—VM. T. Harris, of Massachuse ts. Salary, \$5000.

Commissioner of Lubor—Curroll. D.

Whisht. of Massachusetts. Salary \$5000

Commissioner of Ludor—Curril D. Wright, of Missachinetts. Salary, \$5000.

Commissioner of Railroads—Horace A.

Tayler, of Wisconsin. Salary, \$4500.

Superintendent of Census—Robert P.

Porter, of New York. Salary, \$6000.

Director Geological Survey—John W.

Powell, of Illinois. Salary, \$6000.

Ciril Service Commissioners—Charles Ly-

MAN, of Conu., President; Tieo. Roosevelt. of New York; Hugh S. Thompson, of S. C. Salary, \$3500. Chief Examiner—Wm. H. Wybster, of Coun.; \$3000. Secretary—John T. Doyle, of New York; \$2000.

#### U. S. SUPREME COURT.

Chief Justice-ME.VILLE W. FULLER, of Illinois, appointed 1888. Salary, \$10,500. Eight Associate Justices, at \$10,000: St-phen J. Field, California, 1803; Joseph P. Bradley, New Jersey, 1870; John M. Harlan, Kentucky, 1871; Ilorace Gray, Massachusetts, 1881; Samuel Blatchford, New York, 1882; Lucius Q. C. Lamar, Mississippi, 1888; David J. Brewer, Kansas, 1889; Henry B. Brown, Michigan, 1890 1890.

#### U. S. ARMY.

[The maximum force allowed the army by existing law is 2155 commissioned officers and 25,000 enlisted men.]

25,000 enlisted men. Major-Generals—John M. Schofield (commander), Oliver O. Howard, Nelson A. Miks. Pay, \$7500 each. Brigadier-Generals—David S. Stanley, John Glibbon, T. H. Ruger, Wesley Merritt, John R. Brooke, Alex. McD. McCook. Pay, \$5500 each. All the members above named receive an allowance for quarters, fuel, and forage, in addition to their pay proper.

Admiral—David D. Porter. Pay, \$13,000.
Reur Admirals—Lewis A. Kimberly, Bacroft Gherardi, Daniel L. Brain . George E.
Belknap, Pavid B. Harmony, A. K. Beniam.
Pay, \$6000.
Ten Commodores on the active list receive

\$5000 each; Captains, \$4500 each; Command ers. \$3500 each.

#### THE SENATE—FIFTY-FIRST CONGRESS.

President—Levi P. Morton. Chaptain—Rev. J. G. Butler, D. D. Secretary—Gen. Anson G. Mot'ook. Chief Clerk—(HARLES W. JOHNSON. Sergeant-at-Arms—Wm. P. CANADY. Executive Clerk—James R. Young. Senators, at \$5000 each and mileage :

ALABAMA—James L. Pugh, D., term expires 1891; John T. Morgan, D., 1895. ARKANSAS.—James K. Jones, D., 1891; James

H. Berry, D., 1895.

California.—Leland Stanford, R., 1891; George Hearst, D., 1893. COLORADO.—Henry M. Teller, R., 1891; E. O. Wolcott, R., 1895.

CONNECTICUT. - Orville H. Platt. R., 1891:

Joseph R. Hawley, R., 1893. DELAWARE.-George Gray, D., 1893; Anthony

Higgins, R., 1895. FLORIDA.-Wilkinson Call, D., 1891; Samuel

Pasco, D., 1893.

GEORGIA. – Joseph E. Bro Alfred H. Colquitt, D., 1895. IDAHO. — George L. Shoup. Brown, D., 1801:

R., 1891; W. J. McConnell, R., 1898. [Fred T. Dubois, R., 189-197.] ILLINOIS. Farwell, R., 1891:

-Charles B. Shelby M. Cullom, R., 1895. Indiana.—Daniel W. V Voorhees, D., 1891;

David Turpie, D., 1895. Iowa.—James F. Wilson, R., 1895; Wm. B. Allison, R., 1897.

KANSAS.—John J. Ingalls, R., 1891; P. B. Plumb, R., 1895. KENTUCKY.—J. G. Carlisle, D., 1895; J. S. C. Blackbury, D., 1807.

Louisiana.--James B. Eustis, D., 1891; R. L.

Mains.—Eugene Hale, R., 1893; William P. Frye, R., 1895.

MARYLAND .- A. P. Gorman, D., 1893; E. K.

Wilson, D., 1897. MASSACHUSETTS.—Henry L. Dawes, R., 1893;

дамея м. 1895; George F. Hoar. R., 1895. Michigan.—F. B. Stockbridge, R., 1893; James McMillan. R., 1895. Minnesora.—C. K. Davis, R., 1893; W. D.

Washburn. R., 1895. Mississippi.—James Z. George, D., 1893; E. C. Walthall, D., 1895.

MISSOURI.-George G. Vest, D., 1891; F. M MISSOURI.—COC. SC. COCKTEIL, D., 1895.

COCKTEIL, D., 1895.

MONTANA.—W. F. Sanders, R., 1893; Thos. C.

NEBRASKA .- A. S. Paddock, R., 1893; Charles

F. Manderson, R., 1895.

NETADA.—John P. Jones, R., 1891; W. M.
Stewart, R., 1893.

NEW HAMPSHIRE.-Henry W. Blair, R., 1891;

NEW HAMPSHIRE.—Henry W. Blair, R., 1891; Wm. E. Chandler, R., 1895.
NEW Jensky.—R. fus Blodgett, D., 1893; John R. McPherson, D., 1895.
NEW YORK.—Wm. M. Evarts, R., 1891; Frank Hiscock, R., 1893.

NORTH CAROLINA.—Zebulon B. Vance, D., 1891; M W. Ransom, D., 1895. NORTH DAKOTA.—Gilbert A. Pierce, R., 1891; Lyman R. Casey, R., 1893. OH10.—Jenry B. Payne, D., 1891; John

Oнвоом.—John H. Mitchell, R., 1891; Joseph N. Dolph, R., 1895.

PENNSYLVANI ..-J. Donald Cameron,

PENNSYLVANIA.—J. DOHRAG CAMEATA, A., 1891; M. S. Quay, R., 1893.
RHODE ISLAND—Nelson W. Aldrich, R., 1893; N. F. | Ixon, R., 1895.
SOUTH CAROLINA.—Wade Hampton, D., 1891; M. C. Buller, D., 1895.
SOUTH DAKOTA.—G. C. Moody, R., 1891; R. F.

Pettigrew, R., 1803.

TENNESSEE.—Wm. B. Bate, D., 1893; Isham G. Harris, D., 1895. TEXAS.—Join H. Reagan, D., 1893; Richard Coke, D., 1895.

Vermont.—Geo. F. Edmunds, R., 1893; Justin S. Morri I. R., 1897. Virgoin.A.—John W. Daniel, D., 1893; John S. Barber, D., 1895.

Washington,-Watson C. Squire, R., 1891;

John B. Allen, R., 1893. WEST VIRGINIA.—Charles J. Faulker, D.,

1893; John E. Kenna, D., 1895. Wisconsin.—John C. Spo Spooner, R., 1891;

Phil-tus Sawyer, R. 1833. Wyoming. -Francis E. Warren., R.; Joseph M. Carey, R. Denn., 37; Rep., 51; Rep. majority, 14.

HOUSE OF REPRESENTATIVES.

[Salary of members, \$5000 and mileage; of Speaker, \$8000.] Speaker-Thomas B. REED, of Maine.

Speaker—I Homas D. Rmed, of Manuel. Clerk—EDW. MCPHERSON, of Pennsylvania. Sergeant-at-Arms—A. J. Holmes, of Iowa. Chaplain—Rev. Vm. H. Milburn, D. D. Doorkeeper—Chas. W. Adams, of Maryland. Postmaster—J. A. Wheat, of Wisconsin.

FIFTY-FIRST CONGRESS. FIFTY-SECOND CONGRESS

Alabama. Richard H. Clarke, D. Hilary A. Herbert, D. William C. Oates, D. Alabama. Richard H. Clarke, D. H. A. Herbert, D. William C. Oates, D. Louis W. Turpin, D. James E. Colb, D. J. H. Bankhead, D. J. V. McDuffle, R James E. Cobb, D John H. Ankhead, D. J. H. Bankhead, D. William H. Forney, D. Win. H. Forney, D. Joseph Wheeler, D. Joseph Wheeler, D.

Arkansas. Arkansas. L. P. Featherston, R. C. R. Breckingdge, D. William H. Cate, D. C. R. Breckin idge, D.

Thomas C. McRae, D. John H. Rogers, D. Samuel W. Peel, D. Thomas C. McRae, D. William L. Cerry, I Samue' W Peel, D. California. California. T. J. Geary, D. A. Caminetta, D.

Vacancy. Marion Biggs, D. Joseph McKenna, R. Joseph McKenna, R. W. W. Morrow, R. Thos. J. Clunie, D. Wm. Vandever. R. John T. Cutting, R. E. J. Loud, R. Wm. W. Bowers, R.

Colorado. Colorado. Hosea Townsend, R. Hosea Townsend, R. Connecticut

Connecticut. Lewis Sperry, D. W. F. Willcox, D. Wm. E Simouds, R. W. F. Willcox, D. Chas. A. Ru-sell, R. Frederick Miles, R. Charles A. Russell, R. R. E. DeForest, D.

Delaware. Delaware. John W. Causey, D. J. B. Pennington, D. Florida. Florida. R. H. M. Davidson, D. S. R. Mallory, D.

Robert Bullock, D. Robert Bullock, D. Georgia. Grorgia.

Rufus E. Lester, D. Henry G. Torner, D. Charles F. Crisp, D. Thos. W. Grimes, D. Rufus E. Lester, D Henry G. Turner, D. Charles F. Crisp, D. Charles L. Moses, D. John D. Stewart, D. L. F. 1 ivingston, D. James II. Blount. D. James H. Blount, D. Judson C Clements, D.
Henry H Carlton, D.
Allen D. Chidler, D.
Geo. T. Larnes, D. R. W. Everett, D. Thomas G. Lawson, D. Thomas E. Winn, D. Thomas E. Watson, D

Idaho.

Illinois. Abner Taylor, R. Frank Lawler, D Wm. E. Mason, R.

Idaho Willis Sweet, R.

Illinois. W. G. Ewing, D. L. E. McGaon, R. A. E. Durborrow, D. George E. Adams, R. Albert J. Hopkius, R. Robt. R. Hirt, R. T. J. Hende son, R. Chas. A. Hill, R.
Lewis E. Payson, R.
P. S. Post, R.
Wm. II. Gest, R.
Scott Wike, D. Wm. M. Springer, D. J. H. Rowell, R. Joseph G. Cannon, R. Geo. W. Fithian, D. Edward Lane, D. Win. S. Forman, D. W. S. Forman, D. James R. Williams, D. J. R. Williams, D. Geo. W. S ith, R. Indiana.

Wm. F. Parrett, D. John H. O'Neall, D. Jason B. Brown, D. Wat. S. Holman, D. Geo. W. Cooper, D. Thos. M. Browne, R. Wm. D. Bynum, D. E. V. Brookshire, D. Joseph B. Cheadle, R. Wm. D. Owen, R.
A. N. Martin, D.
C. A. O. McClellan, D.
Benj. F. Shively, D.

Iowa. John H. Gear, R. Walter I. Hayes, D. D. B. Henderson, R. J. H. Sweeney, R. Daniel Kerr, R. John F. Lacey, R. J. A. T. Hun, R.
James P. Flick, R.
Joseph R. Reed, R.
Jonathan P. Dolliver, R. J. P. Dolliver, R.
Joseph S. Struble, R.
George D. Perkin

Kansas Edmund N. Morrill, D. Case Proderick, R. Edward H. Funston, R. E. H. Funston, R. Bishop W. Perkins, R. B. H. Clover, D. Harrison Kelley, R. John G. Otis. D. John A. Henderson, R. John M. Davis, D. Erastus J. Turner, R. Samuel R. Peters, R.

Kentucky Wm. J. Stone, D. Wm. T. Ellis, D. I. H. Goodnight, D. A. B. Montgomery, D. Asher G. Caruth, D. W. W. Dickerson, D. W. C. P. Breckinridge, D.

Jas. B. McCreary, D. Thos. N. Paynter, D. John H. Wilson, R. H. Frank Finley, R.

Louisiana. Theo. S. Witkinson, D. Adolph Meyer, D. H. Dudley Coleman, R. M. D. Lagan, D. Andrew Price, D. Andrew Price, D. N. C. Blanchard, D. Charles J. Boatner, D. S. M. Robertson, D.

Maine. Thos. B. Reed, R.
Nelson Dingley, jr., R.
Seth L. Milliken, R.
S. L. Milliken, R. Chas. A. Boutelle, R. Maryland.

Chas. H. Gibson, D. Herman Stump, D. Harry W. Rusk, D. H. Stockbridge, jr., R. Isidor Rayner, D.

W. C. Newberry, D. Albert J. Hopkins, R. Robert R. Hitt, R. T. J. Henderson, R. Lewis Stewart, D. H. W. Snow, D. Philip S. Post, R. Benjamin T. Cable, D. Scott Wike, D. Wm. M. Springer, D. Owen Scott, D. S. T. Busey, D. George W. Fithian, D. Edward Lane, D. George W. Smith, R.

Indiana. William F. Parrett, D. John L. Bretz. D. Jason B. Brown, D. Wm. S. Holman, D. George W. Cooper, D. H. U. Johnson, R. Wm. D. Bynum, D. E. V. Brookshire, D. Daniel Waugh, R. D. A. Patton, D.
A. N. Martin, D.
C. A. O. McClellan, D.
Benj. F. Shively, D. *Iowa.* John J. Seerley, D.

Walter I. Hayes, D. D. B. Henderson, R. Walter H. Butler, D. J. T. Hamilton, D. F. E. White, D. J. A. T. Hull, R. James P. Flick, R. Thomas Bown.an, D. George D. Perkins, R. Kansas.

William Baker, D. J. A. Simpson, D. Kentucky. William J, Stone, D. William T. Ellis, D. I. H. Goodnight, D. A. B. Montgomery, D. Asher G. Caruth, D. W. W. Dickerson, D. W. C. P. Breckinridge, D.

James B. McCreary, D. Thomas N. Paynter, D. J. W. Kendall, D. John H. Wilson, R. Louisiana.

N. C. Blanchard, D. Charles J Boatner, D. S. M. Robertson. D. Maine.

C. A. Boutelle, R. Maryland. Henry Page, D.

Herman Stump, D. H. W. Rusk, D.

8. E. Mudd, D. Louis E. McComas, R.

Massachusetts. Chas. S. Randall, R. Elijah A. Morse, R. Joseph H. O'Neil, D. Nathaniel P. Banks, R. Harry Cabot Lodge, R. H. C. Lodge, R. William Cogswell, R. William Cogswell, Fred. T. Greenhalge, R. M. P. Stevens, D. John W. Candler, R. George F. William Cognitive Computer St. William Cognitive Computer St. William Cognitive Computer St. William Cognitive Computer St. William Cognitive Cogni Joseph H. Walker, R. Rodney Wallace, R. F. W. Rockwell, R.

Michigan. John L. Chipman, D. Edward P. Allen, R. James O'Donnell, R. Julius C. Burrows, R. C. E. Belknap, R. Mark S. Brewer, R. J. R. Whiting, D.
A. T. Bliss, R.
B. M. Cutcheon, R.
F. W. Wheeler, R.
S. M. Stephenson, R. Minnesota. Mark H. Dunnell, R.

John Lind, R. Darius S. Hall, R S. P. Snider, R. Sol. G. Comstock, R. Mississippi. John M. Allen, D.
Jas. B. Morgan, D.
Thos. C. Catchings, D.
Clarke Lewis, D.
Clarke Lewis, D. C. L. Anderson, D. Thos. R. Stockdale, D. Chas. E. Hooker, D.

Missouri Wm. H. Hauch, Chas. H. Mansur, D. Alex. M. Dockery, D. R. P. C. Wilson, D. John C. Tarsney, D. John T. Heard, D. R. H. Norton, D. F. G. Niedringhaus, R. John J. O'Neill, D. Seth W. Cobb, D. Samuel 'yrnes, D. Pichard P. Bland, J. P. Bland, Wm. H. Hatch, D. Wm. J. Stone, D. Wm. H. Wade, R. R. H. Whitelaw, D. Montana.

Thes. H. Carter, R. Nebraska. W. J. Cornell, R. Gilbert L. Laws, R. Geo. W. E. Dorsey, R.

Nevada. Horace F. Bartine, R. H. F. Bartine, R. New Hampshire. Alonzo Nute, R. Orren C. Moore, R.

New Jersey. Chris. A. Berger, R. James Buchanan, R S. A. Geissenhainer, D. Samuel Fowler, D. Chas. D. Beckwith, R. Herman Lehlbach, R. Wm. McAdoo, D.

New York. James W. Covert, D. Felix Campbell, D. Wm. C. Wallace, R. Barnes Compton, D. William McKaig, D. Massachusetts.

Charles S. Randall, R. Elijah A. Morse, R. John F. Andrew, D. Joseph H. O'Neil, D. Sherman Hoar, D. H. C. Lodge, R. William Cogswell, R. George F. Williams, D. Joseph H. Walker, R. F. S. Coolidge, D. John C. Crosby, D.

Michigan. John L. Chipman, D. James S. Gorman, D. James O'Donnell, R. Julius C. Burrows, R. M. H. Ford, D. Byron G. Stout, D. J. R. Whiting, D. H. M. Youmans, D. H. H. Wheeler, D. T. A. E. W adock, D. S. M. Stephenson, R.

Minnesuta. Wm. H. Harries, D. John Lind, R. Oliver N. Hall, D. James N. Castle, D. S. G. Comstock, R. Mississippi.

J. H. Beeman, D. T. R. Stoubdal R. Stockdale, D. Charles E. Hooker, D. Missouri

Wm. H. Hatch, D. Charles H. Mansur, I Alex. M. Dockery, D. R. P. C. Wilso D. Samuel 'yrnes, D. Richard P. Bland, D D. A. D'Armond, D. R. A. Fyan, D. Marshall Arnold, D

Montana. Wm. Wirt Dixon, D. Nebraska.

Wm. J. Bryan, D. Wm. A. McKeighan, D. W. Thompson, D. Nevada.

New Hampshire. L. F. McKinney, D. W. F. Daniell, D.

New **Jersey**. C. A. Bergen, R. James Buchanan, R. J. A. Geissenhainer, D Samuel Fowler, D. C. A. Cadmus, D. Thomas D. English, 19 E. F. McDonald. D.

New York James W. Covert, I David A. Boody, D. W. J. Coombs. D.

John M. Claney, D. Thomas J. Magner, D. John R. Fellows, D. Edw. J. Dunphy, D. T. J. Campb II, D. A. J. Cummings, D. F. B. Spinola, D. J. DeW. Warner, D. P. F. Elever, D. John M. Clancy, D. Thomas F. Magner, D. C. H. Turner, D. E. J. Dunphy, D. J. H. McCarthy, D. Amos J. Cummings, D. F. B. Spinola, D. John Quinn, D. Reswell P. Flower, Ashbell P. Fitch, D. R. P. Flower, D.
A. hbel P. Fitch, D.
W. G. Stahlnecker, D. W. G. Stahlnecker, D. Moses D. Stivers, R. John H. Ketcham, R Henry Bacon, D. John H. Ketcham, R. Isaac N. Cox. D. Charles F. Knapp, R. J. A. Quackenbush, R. J. A. Quackenbush, R. Charles Tracey, D. Charles Tracey, D. John Stanford, R. John Sanford, R. John H. Moffit, R. John M. Wever, R. Frederick Lansing, R. Leslie W. Russell, R. James S. Sherman, R. H. W. Bentley, D. George Van Horn, D James J. Belden, R. George W. Ray, R. Sereno E. Payne, R. H. H. Rockwell, D. Vacancy. James J. Belden, R. Milton DeLano, R. Sereno E. Payne, R. John M. Farquhar, R. John R. Laidlaw, R. Wiley, D. Win, G. Laidlaw, R. W. R. W. R. D. N. Lockwood, D. Thomas L. Buntana M. R. W. R. D. M. R. D. M. R. D. W. Thomas L. Bunting, D.

Thos. G. Skinner, D. H. P. Cheatham, R. C. W. McClammy, D. W. A. B. Branch, D. H. P. Cheatham, R. B. F. Grady, D. B. H. Bunn, D. Benj. H. Bunn, D. A. II. A. Williams, D. John H. Brower, R. Alfred Rowland, D. S. B. Alexander, D. John S. Henderson, D. J. S. Henderson, D. Wm. H. H. Cowles, D. W. H. H. Cowles, D. H. G. Ewart, R. W. T. Crawford, D. North Dakota.

North Dak∴ta. H. C. Hansbrough, R. M. N. Johnson, R. Ohio.

Benj. Butterworth, R. Bellamy Storer, R John H. Caldwell, R. J. A. Caldwell, R. Eihu S. Williams, R. George W. Houk, George W. Houk, D. Martiu K. Gantz, D. Frederick C. Layton, D. amuel S. Yoder, D. George E. Seney, D. M. M. Boothman, R. D. D. Donovan, D. W. E. Haynes, D. Henry L. Morey, R.
Robert P. Kennedy, R.
Wm. C. Cooper, R.
Wm. E. Haynes, D.
A. C. Thompson, R. D. D. Hare, D. J. H. Outhwaite, D. Robert E. Doan, R. . M. Pattison, D. Wm. H. Enochs, R. Jacob J. Pugsley, R. Jos. H. Outhwaite, D. Irvine Dungan, D. James W. Owens, D. M. D. Harter, D. Chas. P. Wickham, R. Chas. H. Grosvenor, R. James W. Owens, D. Joseph D. Taylor, R. Wm. McKinley, jr., R. John G. Warwick, D.
Alfred J. Pear. on, D.
Joseph D Taylor, R.
Ezra B. Taylor, R.
Vincent A. Taylor, R. Ezra B. Taylor, R. Martin L. Smyser, R. Theo. E. Burton, R. Tom L. Johnson, D. Oregon.

Binger Hermann, R.

John E. Rayburn, R. Alfred C. Harmer, R. Jos. A. Scranton, R. E. S. Osborne, R. James B. Reilly, D.

Oregon. Binger Hermann, R. Pennsylvania. Pennsylvania. Henry H. Bingham, R. H. H. Bingham, R. Charles O'Neil, R. Charles O'Neil, R. Wichard Vaux, D. Wm. McAleer, R. John E. Reyburn, R. John E. Reyoun, A. C. Harmer, R. J. B. Robinson, R. Edwin Hallowell, D. Wm. Mutchler, D. D. B. Brunner, D. Mari iott Brosius, R. L. Ammerman, D. George W. Shonk, R. James B. Reilly, D.

Myron B. Wright, R. H. C. McCormick, R. Chas. R. Buckalew, D. Lewis E. Atkinson, R. Levi Maish, D Edward Scull, R. S. A. Craig, R. John Dalzell, R. Thomas M. Bayne, R. Jos. Warren Ray, R. Chas. E. Townsend, R. W. C. Culbertson, R. C. W. Stone, R. James Kerr, D.

Henry J. Spooner, R. Warren O. Arnold, R. South Carolina. Samuel Dibble, D. George D. Tillman, D. James S. Cothran, D. Wm. H. Perry, D. Johu J. Hemphill, D. George W. Dargan, D. T. E. Miller, R.

Rhode Island.

South Dakota. O. S. Gifford, R. John A. Pickler, R.

Tennessee. Alfred A. Taylor, R. L. C. Houk, R. H. Clay Evans, R. Benton McMillan, D. J. D. Richardson, D. Jos. E. Washington, D. W. C. Whitthorne, D. Benj. A. Enloe, D. Rice A. Pierce, D. James Phelan, D. Texas.

Charles Stewart, D. Wm. H. Martin, D. C. B. Kilgore, D. D. B. Culberson, D. Silas Hare, D. J. Abbott, D. Wm. H. Crain, D. L. W. Moore, D. Roger Q. Mills, D. Joseph D. Sayres, D. S. W. T. Lanham, D.

Vermont. John W. Stewart, R. Wm. W. Grout, R.

Virginia. J. A. Buchanan, D. Paul C. Edmunds, D.

Washington John L. Wilson, R. West Virginia. W. Atkinson, R. Wm. L. Wilson, D. J. D. Alderson, R.

B. Smith. R. Wisconsin Lucien B. Caswell, R. G. W. VanSchaick, R. George H. Brickner, D. A. R. Bushnell, D Charles B. Clark, R. Charles Barwig, R. R. M. La F. llette, R.

John W. Rife, R. Myron B. Wri ht, R. A. C. Hopkins, R. S. P. Wolverton, D. L. E. Atkinson, R. F. E. Beltzhoover, D. Edward Scull, R. George F. Huff, R. John Dalzell, R. William A. Stone, R. A. J. Stewart, R. E. P. Gillespie, D Matthew Griswold, R. Charles W. Stone, R. George F. Kribbs, D.

Rhode Island. Oscar Lapham, D. (No Election.)

South Carolina. W. H. Bramley, D. George D. Tillman, D. George Johnstone. G. W. Shell, D. John J. Hemphill, D. E. T. Stackhouse, D. William Elliott, D.

South Dakota. John R. Gamble, R. John A. Pickler, R.

Tennessee. Alfred A. Taylor, R. L. C. Houk, R. H. C. Snodgrass, D. Benton McMillin, D. Benton McMillin, D.
J. D. Richardson, D.
J. E. Washington, D.
N. N. Cox, D.
Benj. A. Enloe, D.
Rice A. Pierce, D.
Josiah Patterson, R.

Texas. Charles Stewart, D. John B. Long, D. C. F. Kilgore, D. D. B. Culberson, D. Joseph W. Bailey, D. Jo Abbott, D. William H. Crain, D. L. W. Moore, D. Roger Q. Mills, D. J. D. Sayers, D. S. W. T. Lanham, D.

Vermont. H. Henry Powers, R. W. W. Grout, R.

Virginia. Virginia.

Thos. H. B. Browne, R. William A. Jones, D. George E. Bowden, R. J. W. Lawson, D. E. Waddell, Jr., D. James F. Epes, D. P. G. Lester, D. H. St. G. Tucker, D. Chas. T. O'Ferrall, D. Wm. H. F. Lee, D. L. A. Bluchanen, J. A. Buchanan, D H. St. G. Tucker, D.

> Washington John L. Wilson, R. West Virginia. J. O. Pendleton, D. Wm. L. Wilson, D. J. D. Alderson, D. Jas. A. Capehart, D.

Wisconsin. C. A. Babbitt, D. Charles Barwig, D. John L. Mitchell, D. George H. Brickner, D. L. M. Miller, D.

O	Frank (Johnson D	THE CENSUS.	
Ormsby B. Thomas, R. Nils P. Haugen, R.	Nils P. Haugen, R.	Corrected up to December 28, 1890.	
Myron H. McCord, R.	Thomas Lynch, D.	1890.	1880.
Wyoming.	Wyoming.	The United States62,622,250	50,155,783
T 111 480 T	Clarence D. Clark, R.	NORTH ATLANTIC DIVISION.	,,
Republicans, 170; Dem crats, 160; Republi	- Democrats, 244; Re- i- publicans, 87; va-	Maine 661,086	648,936
can majority, 10.	cancy, 1; Democratic	New Hampshire 376,530	346,991
	majority, 157.	Vermont	332,286
TERRITORIAL DELE-	TERRITORIAL DELE-	Massachusetts 2,238,943 Rhode Island 345,506	1,783,085 276,531
GATES.	GATES. Arizona.	Connecticut 746.258	276,531 622,700
Arizona. Marcus A. Smith, D.	Marcus A. Smith, D.	New York 5,997,853	5,052,571
Idaho.		New Jersey 1,444,938 Pennsylvania 5,258,014	1,131,116 4,282,891
Fred. T. Dubois, R.		Tennsylvania	
New Mexico.	New Mexico.	Totals17,401,545	14,507,407
Antonio Joseph, D.	Antonio Joseph, D.	SOUTH ATLANTIC DIVISION.	
Utah.	Utah.	Delaware	146,608
John T. Caine, D.	John T. Caine, D.	Maryland 1,042,390	934,943
Wyoming. Joseph M. Carey, R.		District of Columbia 230,392	177,624
II G MINIGO	TERS ABROAD.	Virginia	1,512,565 618,457
Countries.	Name. App.	North Carolina 1,617,947	1.399.750
Argentine Republic	.J. R. G. Pitkin1889	South Carolina 1,151,149	995,577
Relgium	Name. App. J. R. G. Pitkin 1889 Fred D. Grant 1889 E. H. Terrill 1889	Georgia	1,542,180 269,493
Bolivia	.E. H. Terrill1889 .T. H. Anderson1889 .Robt. Adams, jr1890		
Brazil	Robt. Adams, jr 1890	Totals 8,857,920	7,597,197
Chili	.Edwin H. Conger. 1890 Patrick Egan 1889	NORTHERN CENTRAL DIVISION	N.
China	.Patrick Egan	Ohio 3,672,316	3,198,062
Colombia	.John T. Abbott 1889	Indiana	1,978,301
Corea	. Hugh N. Dinsmore. 1886	Illinois 3,826,851	3,077,871 1,636,937
France	.Clark E. Carr	Michigan 2,093,889   Wisconsin 1,686,880	1,815,497
Germany	.W. W. Phelps1889	Minnesota 1,301,826	780,773
Great Britain	. RODI. 1. LIECOIII1009	Iowa	1,624,615
Roumania	A. L. Snowden1889	Missouri	2,168,380 36,909
Sarvia	1	South Dakota 328,808	98,268
Hawailan Islands	.J. L. Stephens1889	Nebraska	452,402
Пауш	Fred Douglass1889 .A. G. Porter1889	Kansas 1,427,096	996,096
Janan	J. F. Swift1889	Totals	17,364,111
Liberia	.E. E. Smith1888 .Thomas Ryan1889		
Mexico	.Thomas Ryan1889 .S. R. Thayer1889	SOUTHERN CENTRAL DIVISION	
Persia	.E. Spencer Pratt. 1886	Kentucky	1,648,690 1,542,359
Peru	John Hicks1889	Alabama 1,518,017	1,262,505
Portugal	Geo. S. Batcheller 1890	Mississippi	1,181,597
Siam	Chas. E. Smith 1890 S. H. Boyd 1890 E. Burd Grubb 1890 W. W. Thomas, jr. 1889 J. D. Washburn 1889	Louisiana	939,946 1,591,749
Spain	.E. Burd Grubb1890	Oklahoma	2,002,120
Sweden and Norway	.W. W. Thomas, jr.1889	Arkansas 1,128,179	802,525
Turkey	Sol. Hirsch1889	Totals	8,919,371
Uraguay and Paragua	yGeo. Maney1889 .W. L. Scruggs1889		0,010,011
		WESTERN DIVISION.	00.450
	Austria, Brazil, Central	Montana	39,159 20,789
	, Colombia, France, Ger-	Colorado	194,327
	Italy, Japan, Mexico,	New Mexico 158,593	119,565
	and Turkey, rank as En-	Arizona	40,440 148,963
	nd Ministers Plenipoten-	Nevada	62,266
tiary; the others a	re Ministers Resident.	Idaho 84,485	82,610
Those to Great Britain	n, France, Germany, and	Washington	75,116 174,768
Russia, receive \$17,5	00 a year; to Austria,	Oregon	174,700 864,694
Brazil, China, Italy, Ja	apan, Mexico, and Spain,		
\$12,000; to Central A	merica, Chili, Peru, and	Totals 3,027,613	1,767,697
	mbia, Argentine Repub-	This does not include Alaska,	which had
Re Deleises House	tion Talamia and the	80 178 people in 1880 the Indian	Territory.

lic, Belgium,

and Siam, \$5000.

Hawaiian Islands, and the

Netherlands, \$7500; Sweden and Norway, \$7400; Greece, etc., \$6500; Venezuela, \$6000; and Bolivia, Corea, Hayti, Liberia, Persia, Switzerland, Denmark, Paraguay, Portugal, This does not include Alaska, which had 30,178 people in 1880; the Indian Territory, whose population is given in the late report of the Indian Agent (1890) as 206,500; and Indians on reservations—those not taxed are by law not included in the census, and in 1890 were estimated at 245,000. Making reasonable additions upon the basis of these to the figures above, and we have a total population slightly

exceeding 63,000,000. Numerous reports of defective enumeration, in some cases proved true by recounts, probably justify the estimate of 1,000,000 more as uncounted; so that it is fairly safe to speak of the population of the United States in round numbers as 64,000,000. The total population in 1880 was estimated by Spofford at 50,500,000.

The percentages of increase from 1880 to 1890 kansas, 40.58; California, 39.72; Colorado, 112.12; Connecticut, 19.84; Delaware, 14.93; District of Columbia, 29.71; Florida, 45.24; Georgia, 19.14; Idaho, 158.77; Illmois, 24.32; Indiana, 10.82; Iowa, 17.68; Kansus, 43.37; Kentucky, 12.73; Lounsiana, 19.01; Maine, 1.87; Maryland, 11.49; Massachusetts, 25.57; Michigan, 27.92; Minnesota, 66.74; Mississippi, 13.96; Missouri, 28.56; Montana, 237.49; Nebraska, 134.06; Nevada, 26.51 (decrease); New Humpshire, 8.51; New Jersey, 27.74; New Mexico, 28.46; New York, 18.00; North Carolina, 15.59; North Dakota, 395.05; Ohio, 14.83; Oregon, 79.53; Pennsylvania, 22.77; Rhode Island, 24.94; South Carolina, 15.63; South Dakota, 234.60; Tennessee, 14.60; Texas, 40.44; Utah, 44.42; Vermont, 04; Virginia, 23.34; Wisconsin, 28.23; Wyoming, 192.01.

The following table shows the relative rank in population of the St. tes and Territories in 1890 and in 1880: are: For Alabama, 19.84; Arizona, 47.43; Ar-kansas, 40.58; California, 39.72; Colorado,

45. Idaho,

49. Nevada.

46. Oklahoma, 47. Wyoming,

Arizona,

1890. 1880. New York, 1. New York, Pennsylvania, 2. Pennsylvania, Ohio. 3. Illinois, Illinois, Ohio, Missouri, Missouri. Indiana, Massachusetts, Massachusetts,
 Texas, Kentucky, 8. Indiana, 9. Michigan, Michigan, Iowa, Iowa, 11. Kentucky, Texas, 12. Georgia, 13. Tennessee, Tennessee, Georgia, Wisconsin, 14. Virginia. North Carolina, 15. Virginia, Wisconsin, 16. North Carolina, Alabama. 17. Alabama, Mississippi, 18. New Jersey, New Jersey, 19. Kansas, 20. Minnesota Kansas, South Carolina, 21. Mississippi, California, Louisiana. Maryland, California, 23. South Carolina, 24. Arkansas, 25. Louisiana, 26. Nebraska, Arkansas, Minnesota, 27. Maryland, 28. West Virginia, Maine, Connecticut, 27. Connecticut, West Virginia, 30. Maine, Nebraska. 81. Colorado, 82. Florida, 33. New Hampshire, New Hampshire, Vermont, Rhode Island. 34. Washington, Florida. 35. Rhode Island, 36. Vermont, Colorado. District of Columbia, 37. South Dakota, Oregon, 38. Oregon, Delaware. 39. Dist. of Columbia. Utah. 40. Utah, 41. North Dakota, Dakota New Mexico, Washington, Delaware, 43. New Mexico, 44. Montana, Nevada, Arizona

Montana, Idaho,

Wyoming.

The following statement of populations makes an interesting comparison: Russian Empire, 118,354,649; United States, 62,622,250; Germany, 46,852,450; Austria-Hungary, 40,464,808; France, 38,218,903; Great Britain and Ireland, 35,246,633; Italy, 28,460,000; Spain, 12,850,046 17.550.246.

	Pop.	Pop.	Net Rank.
	1880.	1890.	Gain. '80 '90
Albany	90,758	93,523	2,765 21 29
Alle 2 heny	78,682	104,967	26,285 23 28
Atlanta	87,409	65,514	28,105 48 42
Baltimore	332,313	433,547	101,224 7 7
Boston	362,839	446,507	83,668 5 6
Brooklyn	566,663	804,377	237,714 3 4
Buffalo	155,134	254,457	99,323 18 11
Cambridge	52,669	69,837	17,168 31 41
Camden	41,659	58,274	16,615 44 50
Chicago	503,185	1,098,576	585,391 4 2
Cincinnati	255,139	296,309	41,170 8 9
Cleveland	160,146	261,456	101,400 11 10
Columbus	51,647	90,398	38,751 33 30
Dayton	38,678	58,868	20,190 47 48
Denver	35,629	106,670	71,041 49 27
Detroit	116,340	205,699	89,329 18 15
Fall River	48,961	74,351	25,390 37 40
G'd Rapids	32,016	64,147	32,131 58 44
Indianapolis.	75,056	107,445	32,389 24 26
Jersey City	120,722	163,987	43,265 17 19
Kansas City.	55,785	132,416	76,631 30 24
Louisville	123,758	161,005	37,247 16 20
Lowell	59,475	77,605	18,130 27 38
Memphis	33,592	54,586	30,994 54 43
Milwaukee	115,587	203,979	88,392 19 16
Minneapolis.	46,887	164,738	117,851 38 18
Nashville	43,350	76,309	32,959 40 39
Newark	136,508	182,020	45,512 15 17
New Haven	62,882	85,891	23,009 26 32
New Orleans.	216,090	241,995	25,905 10 12
New York	.206,209	1,513,501	247,202 1 1
Omaha	30,518	139,526	109,008 63 21
Paterson	51,031	78,300	27,269 34 37
Philadelphia.	847,170	1,044,894	197,724 2 3
Pittsburgh	156,389	238,473	82,084 12 13
Providence	104,857	132,043	27,186 20 25
Reading	43,278	58,926	15,648 41 47
Richmond	63,600	80,838	17,238 25 36
Rochester	89,366	138,327	48,961 22 22
St. Louis	350,518	460,357	109,839 6 5
St. Paul	41,473	133,156	91,683 45 23
SanFrancisco	233,959	297,990	63,931 9 8
Scranton	45,850	83,450	37,600 39 34
Syracuse	51,792	87,777	35,985 32 31
Toledo	50,137	82,652	32,515 35 35
Trenton	29,910	58,488	28,578 64 49
Troy	56,747	60,605	3,858 29 46
Washington	147,293	228,169	80,867 14 14
Worcester	58,291	84,536	26,245 28 33
Wilmington	42,478	61,437	18,959 42 45
.,			

# 7,750,715 11,312,049 3,593,138

The net gains in these cities during the last ten years amount to nearly 46 per cent of the entire population in 1880, and are about 30 per cent of the entire growth of the country in the decade. In 1880 there were twenty cities in the country with over 100,000 inhabitants each; by the census of 1890 there are twenty-eight. Those which have passed the century mark during the decade are Minneapolis, Omaha, Rochester, St. Paul, Kansas City, Denver. Indianapolis, and Allegheny.

ver, indianapois, and Angineny.
The census bulletins also include valuable statements concerning the bonded and floating debt of the States. Of the North-Central and Western States, Ohio leads in amount of bonded debt in both 1880 and 1890, Missouri company according to the contract of remains second, and Illinois comes third; Colorado exhibits the greatest percentage of increase in bonded debt; and Nevada, from the imperfect figures at hand, shows no

bonded debt.

## PRESIDENTIAL ELECTIONS-POPULAR AND ELECTORAL VOTE. 1888 AND 1884.

1988.						1884.					
	4	ď.	1	- 6	Ele	ct.		Į į	1 20	١	Elec
STATES.	Harrison. Rep.	Cleveland Dem.	Fisk, Prohib.	Streeter, Labor.	Har.	Cleve.	Blaine, Rep.	Cleveland, Dem.	Butler, People's.	St. John, Prohib.	Cleve.
Alabama	57,197	117,310	583	151122	REAL	10	59,591	93,951	873	612	10
Arkansas	58,752		614	10,613	2.3	7	50,895		1,847	2744	7 .
'alifornia	124,809	117,729	5.761		8		102,416		2,017	2,920	444
Colorado	51,796	37,610	2,210	112	3		36,290		1,958	761	+ 22
onnecticut	74,584	74,920	4,234			6	65,923	67,199	1,688	2,305	6 .
Delaware	12,973	16,414	400		600	챵	12,951	16,964	6	55	3 .
Clorida	26,659	39,561	403		232	4	28,031	31,766		72	4.
leorgia	40,443	100,472	1.802	136	0.00	12	48,603	94,667	145	195	12 .
Ilinois	370,636	348,594	21.562	8,456	99	211	337,474	812,355	10,910	12,074	
Indiana	263,361	261,013	9,881	2.694	15		238,463	214,990	8,293	3.028	15 .
owa	211,598		3,550	9,105			197,089			1,473	
Kansas	182,502		6.452	36,237	9	10.3	154,406			4,495	+>+
Kentucky	155,134	183,800	5,225	622		13	118.122		1,691	3,139	13 .
ouisiana	30,701	85,032	130		1.25	8	46,347	62,540		0.000	8
Iaine	73,734	50,482		1,345	6		72,209			2,160	441
faryland	99,986	106,168	4.766	1,011		8	85,699			2.794	8
lassachusetts	183,447	151,990		2.2	14		146,724				
lichigan	236,370		20,942	4.542			192,669	149,835			
linnesota	136,359		15,000		7		111,923	70,144	3,583	4,684	
lississippi	30.096		218	99	1	9	43,509			170.	9
dissouri	286,253		4,540		100	16	202 929			2,153	16
Vebraska	108,425	80,552	9,429	4.226	5		76,912	54,391		2,899	
evada	7.088		41	4,000	3	1.14	7,193		26	4,000	
New Hampshire.	45,728	43,358	1.592	13	4	130	43,249		552	1,571	
iew Jersey	144,344	151,493	7,904			9	123 440		3,496	6,159	9
ew York	660,338	635.963	30,231	626	36		562,005		16.984	25,016	36
North Carolina.	134,784	147,902	00,401	0.20	00	11	125,068		10,001	454	11
	416,054	396,455	24,356	3,496	23	20	400,082		5,179	11,069	
Ohio	33,293		1.677	363	3	500	26.860		726	492	0.0
Pennsylvania	526,001	446,633	20,947	3.873		1.10	478,804	392,785	16.992	15,283	666
ennsylvania thode Island	21,960		1,281		4	8.0.3	19,030		422	928	
chode Island		65.825		345574	4	9	21.733		422	31/60	9
outh Carolina	13,740		* neg		100				957	1,131	12
ennessee	139,989	158,787	5,969	20. 400		12	124,078	225,309		3,534	13
exas	88,280		4,749	29,459		13	93,141		3,321		
ermont	45,192	16,788	1,450	*****	4	152	39,514		785 810	1,752	
irginia	150,438	151,977	1,678			12	63,096		810	138	12
Vest Virginia.	78,491	79,330		*****	100	6	139,356		4 800		V
Visconsin	176,553		4,277	8,552	11	2.4%	161,157		4,598	7,656	
Total	5,239,009	5.334.084	\$45,705	141,902	233	168	4,851,981	4,874,986	175,370	150,369	219
lurality		95,025	* 30031.00	1910.00	1		A Contract of	23,005		30000	

1884, 37; Harrison's majority, 1888, 65.

# MICHIGAN.

#### The State Government, 1891.

#### EXECUTIVE-STATE OFFICERS.

Governor-Edwin B. Winans. Salary, \$4000. Lieutenant-Governor-John Strong, jr. Paid

Legislative per-diem during the session.
Secretary of State—Daniel E. Soper.
State Treasurer—Frederick Braastad. \$1000.
Auditor-General—George W. Stone. \$2000.
Commissioner of the Land Office—George T. Shaffer. \$800.

Attorney-General,—Adolphus A. Ellis. \$800. Superintendent of Public Instruction—Fer-

Superintendent of Public Instruction—Ferries S. Fitch. \$1000.

Regents of the University.—Arthur M. Clark,
Lexington, term expires Dec. 31, 1891; Charles
J. Willett, St. Louis, 1891; Charles R. Whitman, Ypsilanti, 1893; Dr. Herman Keifer, Detroit, 1893; Roger W. Butterfield, Grand
Rapids, 1895; Charles Hebard, L'Anse, 1895;
Charles S. Draper, East Saginaw, 1897; Wm.
J. Cocker, Adrian, 1897.

State Board of Education.—Perry F. Powers, Cadillac, term expires Dec. 31, 1894; David A. Hammond, Charlotte, 1896; Samuel S. Babcock, Detroit, 1892; Secretary, ex-officio. Ferris S. Fitch, Pontiac.

#### JUDICIARY-SUPREME COURT.

JUDICIARY—SUPREME COURT.

Chief Justice—John W. Champlin, Grand Rapids, term expires Dec. 31, 1891.

Associate Justices.—Allen B. Morse, Ionia. term expires Dec. 31, 1893; John W. McGrath. Detroit, 1895; Charles D. Long, Flint, 1897; Claudius B. Grant, Houghton, 1899. Clerk, Chas. C. Hopkins, Lansing; Reporter, Wm. D. Fuller, Newaygo. The salary of each Justice of the Supreme Court is \$5000, and of the reporter \$1500. The Clerk receives fees. The court holds four terms annually in Lansing. commencing the first Tuesday after the first Monday in January, April, June, and October. Monday in January, April, June, and October.

#### CIRCUIT JUDGES.

1. Victor H. Lane, Adrian.
2. Thomas O'Hara, Berrien Springs.
3. Geo. Gartner, Henry N. Brevoort, Cornelius J. Reilly, Geo. S. Hosmer, all of Detroit.
4. Erastus Peck, Jackson.
5. Ernstus Peck, Jackson.
6. Ernstus Peck, Jacks

6. Joseph B. Moore, Charlotte. 7. Wm. Newton, Flint.

7. Wm. Newton, Flint.
8. Vernon H. Smith, Ionia.
9. George M. Buck, Kalamazoo.
10. Chauncey H. Gage, Saginaw.
11. Joseph H. Steere, Salt Ste. Marie.
12. William D. Williams, Marquette.
13. J. G. Ramsdell, Traverse City.
14. Albert Dickerman, Muskegon. 14. Albert Dickerman, Muskegon.

Albert Dickerman, Muskegon.
 Noah P. Loveridge, Coldwater.
 Arthur L. Canfield, Mt. Clemens.
 William E. Grove, Grand Rapids.
 George P. Cobb, Bay City.
 J. Byron Judkins, Hersey.
 Daniel J. Arnold, Allegan.
 Henry Hart, Midland City.
 Edward D. Kinne, Ann Arbor.
 William H. Simpson, Au Sable.
 Vatson Beach, Lexington.
 John W. Stone.

25. John W. Stone.
26. Robert J. Kelley, Alpena.
27. John H. Palmer, Big Rapids. 28. Fred H. Aldrich, Cadillac Sherman B. Daholl, St. John.

# LEGISLATURE OF 1891-92.

#### SENATE.

-Frank Smith, D., Detroit. 1st District-Joseph M. Weiss, R., Detroit. 3d—Peter E. Park, D., Detroit. 4th—Augustin C. McCormick, D., Carleton. 5th—George B. Horton, R., Fruit Ridge.

6th—William H. Withington, R., Jackson. 7th—Alfred Milnes, R., Coldwater.

7th—Alfred Milnes, R., Coldwater.
8th—Mardin Sabin, R., Centreville.
9th—John S. Beers, D., Stevensville.
10th—Jan W. Garvelink, R., Fillmore.
11th—William Miller, D., Eaton Rapids.
12th—Marcus Wilcox, D., Corunna.
13th—John R. Benson, D., Mt. Morris.
14th—Charles B. Boughner, D., Pontiac.
15th—Martin Crocker, D., Mt. Clemens.
16th—Robert L. Taylor, R., Lapeer.
17th—John Bastone, D., Caro.
18th—Chauncey W. Wisner, D., Saginaw, E. ide.

Side.

ide.

19th—William Toan, R., Portland.
20th—Peter Doran, D., Grand Rapids.
21st—George F. Porter, D., Conklin.
22d—Enoch T. Mugford, D., Hart.
23d—Aaron B. Brown, D., Sheridan.
24th—Frank L. Prindle, R., Gladwin.
25th—Peter Gilbert, D., Sterling.
26th—Benjamin C. Morse, R., Alpena.
27th—James E. Holcomb. D., Wolverine.
28th—A. Oren Wheeler, R., Manistee.
29th—Robert R. Wilkinson, R., Torch Lake.
30th—George W. Sharp, D., Newberry.
31st—Joseph Fleishiem, R., Menominee.
32d—John H. D. Stevens, R., Ironwood,
Democrats, 18; Republicans, 14. Demoratic majority, 4.

cratic majority, 4.

HOUSE.

Allegan—Royal C. Eaton, R., Spring Grove; John Kolvoord, D., Hamilton. Alpena, Montmorency, Otsego—Lemuel G.

Dafoe, R., Alpena.

Barry—Casper L. Brown, D., Nashvilla.

Bay—Birdsey Knight, D., Bay City; John C.

Rowden, D., Auburn.

Berrien—Hewlett C. Rockwell, D., Benton

Harbor; George A. Lambert, D., Niles. Branch-Darius D. Buell, R., Union City.

Calhoun—Marvin Ferguson, D., Marshall; Frank W. Clapp, R., Battle Creek. Cass—Edward R. Spencer, R., Dowagiac. Charlevoix, Antrim, Manitou—Reynolds Landon, D., Elk Rapids.

Cheboygan, Emmet, Presque Isle—Philip B. Wachtel, D., Petoskey.
Chipperca, Alger, Luce, Mackinaw, School-craft—Michael J. Doyle, D., Sault Ste. Marie.
Clinton—Levi W. Baldwin, D., Fowler.

Delta, Iron-Alonzo R. Northrup, R., Escanaba

-Samuel Miller, D., Eaton Rapids; Eaton-

Editor—Saintel Miler, D., Eaton Raphis; Alden B. Smith, R., Kalamo. Genesee—George E. Houghton, D., Swartz Creek; Marvin L. Seeley, D., Mt. Morris. Grand Traverse, Kalkaska—Jacob N. Tin-klepaugh, R., Kalkaska.

Gratiot—Hugh Chisholm, D., Breckenridge.

Hillsdale—Avery A. Smith, R., Hillsdale; F. Hart Smith, R., Somerset.
Houghton—William Harry, R., Hancock.
Huron—Luke S. Johnson, D., Caseville.

Ingham—Augustin F. Ferguson, D., Okemus, Charles C. Fitch, D., Mason.
Ionia—Frank E. Doremus, D., Portland; Wil-

lard Hawley, R., Saranac.

Iosco, Alcona, Arenac—George Orth, D., Iosco, An Sable.

Au Sable.

Isabella—John W. Curtiss, D., Dushville.

Jackson - Thomas E. Barkworth, D., Jackson: John W. Watts, R., Jackson.

Kalamazoo—John J. Lusk, R., Kalamazoo,
William A. Blake, D., Galesburg.

Kent—Arthur S. White, D., Grand Rapids;
John W. Hayward, D., Grand Rapids; Edmund M. Barnard, R., Grand Rapids; Norton Fitch, R., Soarta.

Mund M. Balland, A., Godland, Lapeer; Frich, R., Sparta,

Lapeer-Frederick G. Bullock, D., Lapeer; Willard Harwood, R., Goodland,

Leelanaw, Benzie—Dennison F. Holden, R.,

Lenawee-John D. Shull, R., Tecumseh; Lewis C. Baker, D., Adrian; Selah H. Ray-mond, R., Manitou Beach.

Livingston—William Harper, D., Madison.

Macomb—Lucius H. Canfield, D., Richmond;

Macomb-Lucius H. Canfield, D., Richmond; Harvey Mellen, D., Romeo. Manistee—Moses R. Denning, D., Manistee. Marquette—George Wagner, R., Nagaunee; Eugene G. St. Clair, R. Ishpeming. Mason—William Harley, D., Riverton. Mecosta—Walker O. Smith, R., Crapo. Menominee—John Perkins, R., Norway. Midland, Clare, Gladwin—William D. Marsh, Midland, Clare, Gladwin—William D. Marsh,

Midland, Clare, Gladwin—William D. Marsh, D., Midland.
Monroe—Samuel P. Jackson, D., Monroe; Charles D. Dodge, D., London.
Montodim - George H. Lester, D., Crystal; Lucius L. Church, R., Howard City.
Muskegon—Francis W. Cook, D., Muskegon; Frank E. Thatcher, D., Muskegon.
Newaygo—David Collins, R., Croton.
Oakland—Arthur R. Tripp, D., Pontiac; William E. Carpenter, D., Pontiac.
Oceana—William F. Lewis, D., Shelby.
Ogemaw. Crawford, Oscoda, Roscommon—Devere Hall, R., West Branch.
Ontonagon, Baraga, Isle Royal, Keweenaw,

Ontonagen, Baraga, Isle Royal, Keweenaw, Gogebic—Louis W. Munthe, D., Ironwood. Osceola, Missaukee—Daniel McGovern, D.,

Tustin.

Ottawa—Gerritt J. Diekema, R., Holland; George F. Richardson, D., Hudsonville.

Saginaw—Edward L. Stone, R., Saginaw, W. Side; Hiram W. Robinson, D., Bridgeport; Rowland Counor, D., Saginaw, E. Side; James W. Graham, D., St. Charles.

Sanilac-Frank J. Ryland, R., Peck; Alonzo Downing, D., Downington.

Shiawassee - Hiram Johnson, D., Center; Philip V. M. Botsford, D., Pittsburg. St. Clair-Frederick H. Bathey, D., Smith's

Creek: Joseph Gibbons, D., Blaine. St. Joseph—George W. Osborn, D., Parkville. Tuscola-James Kirk, R., Fair Grove; Travis Leach, D., Ellington.
Van Buren—Charles L. Eaton, R., Paw Paw;

Van Buren—Charles L. Eaton, K., Taw Faw; Milan Wiggins, R., Bloomingdale. Washtenaw—John V. N. Gregory, D., Dex-ter; James L. Lowden, D., Yysilanti. Wagne—John Miner, D., Detroit; William B. Jackson, D., Detroit; Lawrence Nolan, D., Detroit; Fennois Filday, D. Detroit; William Detroit; Francis Fildew, D., Detroit: Will am E. Henze, D., Detroit; Adolph N. Marion, D., Detroit; William M. Holton, D., Dearborn: W. Worth Wendell, D., Northville; James McCloy,

D., Wyandotte.
Wexford, Lake—Sylvanus Alexander, R., Sherman.

Democrats, 66; Republicans, 34; Dem. maj., 32. Dem. maj. on joint ballot, 36.

#### MILITARY DEPARTMENT. [December 1, 1890.]

Gov. Cyrus G. Luce, Commander-in-Chief, Lansing.

Brig.-Gen. Daniel B. Ainger, Adjutant-General, Charlotte.
Lieut. Col. William W. Cook, Ass't Adjutant-

General, Lansing. Brig.-Gen. Frank D. Newberry, Inspector-General, and ex-officio Member State Military Board, Coldwater

Maj. Edward F. Douglass, Ass't Inspector-Gen., Houghton.

Capt. Frank M. Williams, Ass't Inspector-General, Grand Rapids.

Brig.-Gen. George M. Devlin, Quartermaster-General, Jackson.

Lieut.-Col. La Fayette Harter, Ass't Q. M. General, Detroit. Maj. Frank M. Drumm, Ass't Q. M. General,

Jackson. Col. E. William Cobb, Paymaster-General,

Adrian. Col. E. Crofton Fox, A. D. C., and President

Col. E. Crotton Fox, A. D. C., and President State Military Board, Grand Rapids. Col. Fred E. Farnsworth, A. D. C., and Treasurer State Military Board, Detroit. Col. James N. Cox, A. D. C., Calumet. Col. Joseph W. Kerns, A. D. C., East Sag-

inaw. Col. Frank J. Haynes, A. D. C., Port Huron. Maj. Milo D. Campbell, Military Secretary,

Lansing.
Maj. Robert S. Pratt, Judge Advocate, Bay

FIRST BRIGADE.

Brig.-Gen. Eugene Robinson, Detroit. Lieut.-Col. Chas. E. Locke, A. A. G., Detroit. Lieut.-Col. Jul. Suckert, A. Q. M. G., Detroit. Lieut.-Col. James B. Book, Surgeon, Detroit. Lieut.-Col. James B. Book, Surgeon, Detroit. Lient.-Col. August Goebel, A. I. G., Detroit. Capt. Eugene W. Jones, A. D. C., Grand

Capt. Philip H. Withington, A. D. C., Jackson. FIRST REGIMENT-Field and Staff.

Col. Elmer W. Bowen, Ypsilanti. Lieut.-Col. John E. Tyrrell, Jackson.

Jackson.

Maj. Sidney W. Millard, Ann Arbor. Maj. Charles M. Woodward, Surgeon, Te-

cumseh. Capt. John F. Denslow, Assistant Surgeon,

Muskegon. Capt. Elbridge W. White, Chaplain, Jackson. First Lieut. John W. Barry, R. Q. M.,

First Lieut, Robert Darnton, Adjutant, Adrian.

SECOND REGIMENT—Field and Staff.

Col. Edwin M. Irish, Kalamazoo. Lieut. Col. Wm. T. McGurrin, Grand Rapids. Maj. Charles H. Rose, Grand Rapids. Maj. Wm. F. Hake, Surgeon, Grand Rapids.

Capt. Irwin Simpson, Assistant Surgeon, Kalamazoo

Capt. Abner L. Frazer, jr., Chaplain, Kalamazoo.

First Lieut. Wm. L. White, R. Q. M., Grand Rapids.

First Lieut. Wm. Shakespeare, jr., Adjutant, Kalamazoo.

THIRD REGIMENT—Field and Staff.

Col. Charles R. Hawley, Bay City. Lieut -Col. Frank B. Lyon, Calumet Maj. Cyrus C. Yawkey, East Saginaw. Maj. Arthur Wilkinson, Surgeon, Alpena. Capt. Henry M. Curtis, Chaplain, Flint. Capt. Eugene W. Davis, Assistant Surgeon,

Saginaw. First Lieut. James A. McKay, Adjutant,

Bay City First Lieut, Fred A. Aldrich, R. Q. M., Flint. FOURTH REGIMENT—Field and Staff.

Col. Patrick J. Sheahan, Detroit. Lieut -Col. George W. Corns, Detroit. Maj. Chas. E. Richmond, Detroit. Maj. John E. Clark, Surgeon, Detroit. Capt. W. F. H. Edwards, Assistant Surgeon, Detroit.

Capt. John Munday, Chaplain, Allegan. First Lieut. Charles S. Baxter, Adjutant,

De roit.

#### VOTE FOR GOVERNOR.

COUNTIES.	Winans, D.	Turner, R.	Partridge, P.	Belding, I.
Alcona Alger Allegan. Alpena Antrim. Arenac. Baraga Barry Bay. Benzie Berrien. Branch Calhoun Cass. Charlevoix Cheboygan Chippewa Cliare Clinton. Crawford Delta. Eaton. Eaton.	**************************************	459 279 279 3471 1254 808 247 434 2359 8216 36511 2513 1025 943 604 2620 285 1174 3885 1174 3885 1174 3885 1174 3885 1174 3885 1174	11 4 772 81 252 19 11 517 191 137 572 964 1099 390 128 68 5 137 519 6 69 603 94	480 480 5 222 3300 78 232 2 196 1015 113 7 60 117 42
Genesee Gladwin Gogebic Grand Traverse Gratiot Hillsdale Houghton Huron Ingham Ionia. Iosco Iron Isabella Jackson Kalamazoo Kalkaska	3654 286 1036 701 2283 2671 2085 1980 3874 3787 1417 897 1520 4508 3768 3266 11833	35077 406 1465 1217 2747 3388 2496 1391 3581 3712 1419 833 1558 3733 4250 565 9774	933 35 60 306 557 781 183 171 691 489 90 38 243 749 556 179	81 12 6 116 219 471 27 558 924 10 8 1 1067 198

COUNTIES.	Winans, D.	Turner, R.	Partridge, P	Belding, I.
Keweenaw	79	290	22	9
Lake	585	586	99	2
Lapeer	2407	2429	554	18
Leelanaw	362	570	149	- 9
Lenawee	5267	4979 1899	1306 447	50 684
Livingston	2370 235	243	10	004
Luce Mackinac	776	322	33	·····è
Macomb	3026	2483	285	18
Manistee	1854	1615	266	5
Manitou	97	9		
Marquette	1864	3017	580	14
Mason	1346	1165	184	17
Mecosta	1226	1520	361	232
Menominee	2057	2112	272	27
Midland	776	867 455	106 89	185
Missaukee	533 3163	2251	384	2 8
Monroe Montcalm	2146	3032	515	41
Montmorency	217	249	10	2
Muskegon	3278	2937	578	14
Newaygo	1458	1713	339	160
Oakland	4784	4244	714	147
Oceana	1361	1125	664	9
Ogemaw	509	504	91	4
Ontonagon	588	363	. 9	
Osceola	1006	968	466	
Oscoda	252	327	8	4
Otsego	456 3109	564 2965	62 316	1 19
Ottawa Presque Isle	400	332	12	1 4
Roscommon	286	189	10	, ,
Saginaw	7395	5450	563	24
Sanilac	1897	2015	482	104
Schoolcraft	579	442	95	
Shiawassee	2800	2723	762	361
St. Clair	4826	3922	379	٤
St. Joseph	2387	2394	330	1126
Tuscola	1941	2477	412	1033
Van Buren	1962	2541	542	882
Washtenaw	5201 21524	3313 15867	599 986	41 65
Wayne Wexford	776	909	241	
Total		172205		
	1			

ernor, 347,856. Mr. Partriage, Pronition candidate, received also a portion of the vote of the Patrons of Industry. Mr. Belding was the candidate of the Industrial party.

Lieutenant-Governor.—Strong, D., 180,340; Linton, R., 178,498; Allen, P., 25,410; McGregor, I., 14,291. Strong's maj., 1842.

Secretary of State.—Soper, D., 180,855; Gardner, R., 178,149; Palmiter, P., 25,179; Adams, I., 14,284. Soper's maj., 2706.

State Treasurer.—Braastad, D., 179,744; Moore, R., 178,857; Coddington, P., 25,218; Blackman, I., 14,264. Braastad's maj., 827.

Auditor-General.—Stone, D., 181,072; Giddingts, R., 177,795; Ives, P., 25,427; Graham, I., 14,291. Stone's maj., 3277.

Commissioner of Land Office.—Shaffer, D., 181,061; Berry, R., 177,919; Peck, P., 25,304; Treat, I., 14,128. Shaffer's maj., 3142.

Attorney-General.—Ellis, D., 195,308; Huston, D., 177,822; Adstet, P., 25,310. Ellis'maj., 17,486.

17,486.

Superintendent Public Instruction.—Fitch,

D., 181,189; Schurtz, R., 177,828; Howell, P., 25,300; Littler, I., 14,319. Fitch's maj., 3861. Member of the State Board of Education.—Hammond, D., 181,262; Ballou, R., 177,726; Scott, P., 25,341; Powers, I., 14,299. Hammond's maj., 3536.

Justice of the Supreme Court.—McGrath, 10, 181,667; Cabill, R., 177,023; Cheever, P., 25,179; Atkinson, I., 14,383. McGrath's maj.,

The proposition for a Constitutional Convention received 16,431 votes in its favor, and 26,261 against it. Majority against, 9830.

#### CONGRESSMEN.

First District—J. Logan Chipman, D., 21,791; Hibbard Baker, R., 15,861; Caleb S. Pitkin, P., 867; Wm. E. Thornton, I., 49. Chipman's maj., 8980.

Second—James S. Gorman, D., 16,471; Edward P. Allen, R., 14,568; Thos. F. Moore,

Edward P. Allen, R., 14,558; Thos. F. Moore, P., 2522. Gorman's maj., 1903.
Third—James O'Donnell, R., 16,679; John W. Fletcher, D., 14,216; Sam'l Dickie, P., 3187; Rob't Fraser, I., 3423. O'Donnell's maj., 2463.
Fourth—Julius C. Burrows, R., 16,067; George L. Yaple, D., 15,673; G. F. Cunningham, P., 2843. Burrows's maj., 394.
Fifth—Melbourne H. Ford, D., 22,451; Charles W. Watkins, R., 20,153; Edw. L. Briggs, P., 2587. Ford's maj., 2298.
Sixth—Byron G. Stout, D., 17,140; William Ball, R., 16,457; Jay Sessions, P., 3004; Geo. W. Caswell, I.. 1940. Stout's maj., 683.
Seventh—Justin R. Whiting, D., 14,558; James S. Ayres, R., 12,566; John Russell, P., 1280; Alfred Paget, I., 288. Whiting's maj., 1867.

1987.

1987.
Eighth—Henry M. Youmans, D., 17,290;
Aaron T. Bliss, R., 17,154; Wm. M. Smith, P.,
2106. Youmans's maj., 76.
Ninth—Harrison H. Wheeler, D., 15,854;
Byron M. Cutcheon, R., 15,794; O. M. Brownson, P., 2778. Wheeler's maj., 60.
Tenth—Thos. A. E. Weadock, D., 16,721;
Watts S. Humphrey, R., 15,055; Silas A. Lane, P., 943; Chas. S. Kilmer, I., 291. Weadock's

maj., 1666.
Eleventh—Samuel M. Stephenson, R., 16,667; John Semer, D., 14,549; Wm. H. Simmons, P., 1759. Stephenson's maj., 2118.

#### POPULATION BY COUNTIES.

	1880.	1884.	1890.
Alcona	3107	4025	5367
Alger			1245
Allegan	37,815	38,666	38,913
Alpena	8789	12,683	15,525
Antrim	5237	8716	10,391
Arenac		4027	5563
Baraga	1804	3039	3034
Barry	25,317	24,102	23,708
Bay	38,081	51,221	56,357
Benzie	3433	4389	5289
Berrien	36,785	37,776	41,237
Branch	27,941	27,661	26,754
Calhoun	38,452	41,585	43,432
Cass	22,009	21,202	20,848
Charlevoix	5115	9275	9627
Cheboygan	6524	9946	11,986
Chippewa	5248	8422	11,916
Clare	4187	5549	7550
Clinton	28,100	27,135	26,458
Crawford	1159	2389	2959
Delta	6812	9992	15,110
Eaton	31,225	31,802	32,025
Emmet	6639	7994	8714
Genesee	39,220	38.776	89,351
Gladwin	1127	1539	4207
Gogebic			13,181
Grand Traverse	8422	12,092	13,350
Gratiot	21,936	25,049	28,632

Hillsdale	32,723	81,686	30,600
Houghton		26,146	34,857
Huron		24.521	28,510
Ingham	. 33,676	34,939	37,134
Ionia		32 559	32,726
Iosco	. 6873	10,602	15,223
Iron			4432
Isabella	. 12,159	16,011	18,777
Isle Royal	55		135
Jackson	. 42,031	45,232	44,935
Kalamazoo		35.281	39,174
Kalkaska		4423	5159
Kent		84,600	109,935
Keweenaw		4667	2829
Lake		7539	6500
Lapeer		30,057	29,131
Leelanaw	(4.35.43	7128	7931
Lenawee		49.584	48,401
Livingston		21,568	20,834
Luce			2431
Mackinaw	. 2902	5171	7808
Macomb		81,293	31,772
Manistee		19.875	24,907
Manitou		1198	H60
Marquette		81,597	39,549
Mason		18,221	16,363
Mecosta		20,597	19,572
Menominee		19,129	33,629
Midland		8726	10,657
Missaukee		3386	5038
Monroe		33.353	32,247
Montcalm		35,356 35,356	32,576
Montmorency.		845	1487
Muskegon		37,554	39,979
Newaygo		18,996	20,466
Oakland	41.537	41,100	41,177
		14,519	15,584
Oceana		3637	5593
Ogemaw		4836	8750
Ontonagon		14,001	14.626
Osceola	. 10,777 . 467	1874	1902
Oscoda	1974	8906	4306
Otsego Ottawa		36,225	35,334
Drocone Jula		4064	4684
Presque Isle Roscommon		2588	2041
		74,795	82,250
Saginaw		29.583	32,511
Sanilae Schooleraft		3846	5798
		28,078	
Shiawas er St. Clair	. 27,059	46,783	30,890 52,039
		26,277	25,401
St. Joseph	. 25,738	30,226	32,448
Tuscola	. &0,190 90 90°		
Van Buren	. 30,807	30,341	80,492 49,955
Washtenaw		41,694 184 058	42,255
Wayne	. 166,444 6815	188,956	252,838
Wexford	0019	10,518	11,262
	1,636,937	1,853,658	2,089,792
	1,000,001	1,000,000	2,000,192

The increase of 1884 over 1880 is 216,721; of 1890 over 1884, 236,134; over 1880, 452,855. All the counties except 17 show gains, some of the counties except 17 show gains, some of them, as Wayne, by a large percentage. The following is an exhibit of population by con-gressional districts: First, 256,838; Second, 153,508; Third, 170,854; Fourth, 157,152; Fifth, 216,908; Sixth, 164,949; Seventh, 173,904; Eighth, 203,782; Ninth, 204,013; Tenth, 180,917; Eleventh, 207,153. This shows the great inequality of our present representation in Congress, the First or Datroid district for example having First, or Detroit district, for example, having nearly 100.000 more of population than the Second. This will be remedied by the new apportionment of Congressmen, to be made on the basis of the recent census,—it is onder-stood at 174,500 people for each Representa-tive, which would give Michigan 12 Congressmen, with a surplus amounting to 7077. Detroit will have one Congressman by itself, and some part of it be joined with Wayne and other counties to form another Congressional district.

1111161 1 74	1011102	in Cilibs.	
	1880.	1884.	1890.
Detroit	116,340	132,956	205,669
Grand Rapids	16,507	41,898	64,147
East Saginaw	11,350	29,085	*46,169
Saginaw City	10,525	13,760	-40,10;
Bay City	20,693	29,412	27,826
Muskegon	11,262	17,825	22,668
Jackson	16,105	19,100	20,779
Kalamazoo	13,552	13,909	17,857
Lansing	8319	9774	12,630
Port Huron	8887	10,388	13,519
Battle Creek	7063	10,051	13.090
West Bay City	6397	9490	12,910
Manistee	6930	10,367	12,779
Alpena	6153	9196	11,228
Ishpeming	6039	6840	11,184
Menominee	3947	5577	10,606
Flint	8409	9017	9845
Ann Arbor	8061	7912	9509
Adrian	7849	9319	9239
Marquette	4690	5690	9096
Ludington	4190	5431	7499
Owosso	2501	3868	6544
Cheboygau	2269	3716	6244
Pontiac	4500	5347	6243
Yp«ilanti	4984	5301	6128
Negaunee	4197	4111	6061
Coldwater	4681	5099	5462
Dia Danida	955-0	5000	5.045

THIRTY MICHIGAN CITIES.

By this \*The consolidated city of Saginaw. union Saginaw passes Bay City, and becomes third of Michigan cities. Muskegon has passed Jackson in ten years, and is fifth; Lansing be-comes eighth, in place of Saginaw City: Port Huron goes from eighth to ninth; and Battle Creek takes the place of Manistee as tenth. Other Michigan cities and villages, so far as reported:

3552

4930

4190

Big Rapids..... Monroe .....

Ionia.....

Grand Haven.....

5902

5281

4641

5265

594R

4999

_	1880.	1884.	1890.
Cadillac	2213	3907	4455
Mt. Clemens*	3057	3825	4742
Niles*	4197	4606	4.97
Traverse City		3111	4036
Holland*	2620	2972	3928
Marshall		4079	3957
Hillsdale*		3549	392)
Charlotte*	2910	3595	3848
Wyandotte*	3631	3570	3798
St. Joseph		2623	3733
St. Johns		2623	3119
(dreenville*	3144	3063	3048
Three Rivers	2525	3362	3122
Red Jacket	2140	2100	3070
Hastings*	2531	2632	2951
Dowagiac*	2100	2349	2792
Mt. Pléasant		1943	2744
Lapeer*	2911	2894	2795
Allegan	2305	2638	2663
Howell		2176	2385
Midland City*	1529	2177	2285
Fentonville		2232	2182
Hudson		2311	2176
Eaton Rapids*	3121	2129	1965
Mason*		1884	1877
Lake Linden		2747	1851
Alma	437	1167	1681
Portland		1675	1662
Grand Ledge	1387	1388	1607
Charlevoix		1186	1517
· Ovid		1465	1477
Corunna*		1451	1383
Stanton*		1721	1350
'			

\*Now cities. All figures above, of popula-tion of counties and cities, are based upon previous report of C nsus Bureau, fixing total population at 2,099,792. A later Bulletin fixes the total at 2,093,889; but corrections in detail

are not received in time for this number of the Year-book. There is no great change, however, in any of the figures given for city, town,

or county.

The bonded debt of the State, as returned to the Census Bureau for the fiscal year 1879-80, was \$913,149.97; for 1889-90, \$239,-992.83. Floating debt 1879-90, \$3.416.008.93; 1889-90, \$5,253,920.04. The bonded debt of 1800, \$6,902,604; increase, \$998,559; percentage of increase, 17. Their floating debt in 1880 was \$3,600; 1890, \$191,113; increase, \$187,513; percentage, 5,209. Total debt 1880, \$5,907,645;

1890, \$7,083,717: increase, \$1,186,072; percentage, 20. The sinking fund was \$542,284 in 1880; in 1890, \$808,114; increase, \$265,880; percentage, 49. Total available resources in 36 cities, 1880, \$1,422,855; 1880, \$2,813,274; increase, \$1,390,419; percentage, 93. Debt in excess of resources in 32 cities, 1880, \$4,583,710; 1890, in 31 cities, \$4,469,562; decrease, \$111,448. Resources in excess of debt in four cities, 1880, \$88,920; 190, five cities, \$189,119; increase, \$90,191; percentage, 91. Annual interest charge of 36 cities, 1880, \$420,569; 1890, \$394,223; decrease, \$98,246. The figures in detail are as follow: Total available resources in 36 cities, 1880, \$26,346. The figures in detail are as follow:

# DETROIT AND WAYNE COUNTY.

## City Government, 1891.

Mayor - Hazen S. Pingree. Salary, \$1200. Mayor's Secretary—Alex. I. McLeod. \$1500. Controller—Peter Rush. \$2000. Deputy Controller—Patrick Barry. Clerk—Augustus G. Kronberg. \$2500.
Deputy Clerk—James H. Kelly. \$2000.
Treasurer—Thomas P. Tuite. \$3000.
Deputy Treasurer — John W. Corc Corcoran.

**\$2000**. Receiver of Taxes - Charles K. Trombly.

**\$2500.** 

Assistant Receiver—Wm. J. Shields. City Counselor-Vacant, by election of John W. McGrath to the Supreme Bench. \$2500. Assistant Counselor—Edw. Minock. \$1500. City Attorney—Charles W. Casgrain. \$250

\$2500. Assistant Attorney-Charles S. McDonald.

\$200.

City Engineer—H. D. Ludden. \$2500. Engineer City Hall—Joseph Kellner. Chief Accountant—Henry P. Sanger. Market Clerk—Anthony J. Kennary. Historiographer—Silas Farmer. Unp Boiler Inspector—Gustave Pfeffen. \$1 \$1200. \$2500. \$1500. \$1600. Gas Inspector-Peter Kraus. \$1034.

Meat Inspectors—Eastern district, George Schindler; Western, Louis J. Ouellette. \$1200. Inspector of Chinneys - Charles Hauser,

Leroy Carway.

Poundmasters and Wood Inspectors-Eastdistrict, Dominick Latour; Western, Albert Erschig. \$900.

Weighmasters — Eastern district, Anthony Clements; Western, Frank Ashley. \$1100.

#### COMMON COUNCIL.

The Board of Aldermen is composed of two members from each of the 16 wards, 32 in all, who each receive an annual salary of \$600.
Half the board are elected at the November election each year, and the terms are for two years. The following will constitute the Board of Aldermen for 1891, commencing on the second Tuesday of January, 1891. Each the of the Aldermen first named in each ward below serves for one year; the others for two years.

1st Ward-Walter H. Coots, R.: Joseph T.

Lowry, R. 2d—Julius P. Gilmore, R.; James Vernor, R. 3d—Frank N. Reves, R.; Wm. P. Langley, R. Webster, R.

5th-Charles P. Karrer, D.; John C. Jacob,

6th—Cyrus B. Barnes, R.; James Lennane, D. 7th—Albert Roth, D.; Henry Schehr, R. 8th—Murray Watson, D.; Wm. B. Thompson, D.

9th-Ernest L. Reschke, R.; Frank Schmidt, D.

10th-Charles A. Buhrer, R.; Anthony H. Reynolds. D. 11th-Wm. Rickert, R.; Michael W. Mc-

Guire, D.

12th-James Brennan, Ind.; Adam Hoffman, R.

nan, R.

13th—Wm. O'Regan, D.; Jacob F. Meier, R.

14th—Wm. Uthes, D.; Neil Grant, D.

15th—George Scott, D.; John A. Fisher, D.

16th—Ferdinand Amos, D.; John McIntyre, D.

At the November election, 1890, John C. Coll

At the November election, 1830, John C. Coll was elected to fill the unexpired term of Frank Wotzke, deceased. His term expires on the second Tuesday of January, 1891.

Democrats, 16; Republicans, 15; Independent Dem., 1. Until the reorganization of the Council, Alderman Griggs is President of the body, and Alderman Vernor President pro

tempore.

BOARD OF ESTIMATES.
At large—. C. Bowen, John N. Bagley,
Anthony Petz. Louis P. Campau.
1st Ward—John J. Mulheron, Wm. R. Far-

rand.

and.
2d—Charles Wright, James B. McKay.
3d - Jacob P. Pospeshil, Adolphus Merritt.
4th—Walter G. Seeley, Wm. L. Wild.
5th—Theo. Gorenflo. Louis A. Ruch.
6th→Patrick H. Hickey, Richard F. Reaume.
7th—J. Wm. Koch, Martin Bayer.
8th—James Cornell, Wm. Viehoff.
9th—Anthony Valentine, John B. Peters.
10th—Chas. P. Hickox, vacancy.
11th \_Wm. Sauer. John J. Raeske.

11th-Wm. Sauer, John J. Raeske.

12th—Albert Ioepka, Adam Hoffman. 13th—George Galster, Peter Stenius.

14th—Alex. Nelson, L. Verdon. 15th—Christopher Damitio, Leo Lenaert,

16th-John Markey, Sam'l Hargreaves.

The Board of Estimates is composed of 32 members, two from each ward, half of whom are elected at the November election of each year. The members of the Board ex officio are the President of the Common Council, the Chairman of its Committee of Ways and Means, the City Controller, City Counselor, President of the Board of Education, the Boards of Water, Police, Fire, and Poor Commissioners, and the senior members of the Boards of Public Works and of Inspectors of the House of Correction. They take part in the deliberations of the Board, but do not vote. It is the office of this Board to consider the general city estimates and all measures the general city estimates and an measures for raising n oney by tax-levy or bond-issues, and to decrease or disapprove, but not increase, the same. Only amounts approved by the Board can be raised. Members receive \$3 for each day of actual session. The first-named in each ward will go out of office in one year, the second-named in two years.

#### BOARD OF PUBLIC WORKS.

Jacob Guthard, Michael J. Griffin, one vacancy by resignation of James Hanley, Sheriff elect. \$2500.

President—Jacob Guthard.

Secretary—John McVicar. \$2000. Chief Clerk—James C. Oldfield. \$1200. Permit Clerk—Frank X. Lingemann. Record Clerk—Charles Waite.

Chief Sewer Inspector—Francis J. Chamber-

ain. \$3.75 a day. Sidewalk Inspectors—Walter V. Kies, John A. Wilkie, Frank Favor, jr., Wm. A. Raynor, M. Brennan, Joseph Przybylowski. \$1034.

BOARD OF BUILDING INSPECTORS. E. W. Simpson, Edward R. Harris, Fred Canney. \$1200.

COMMISSIONERS OF SINKING FUND. Controller, Treasurer, Mayor. and Council Committee on Ways and Means.

BOARD OF POLICE COMMISSIONERS. Wm. C. Colburn, Horace M. Dean, Sidney D. Miller, Frank J. Hecker. President—Wm. C. Colburn. Secretary and License Collector—L. R.

Secretary and Meserve. \$2500.

Superintendent of Police-Gen. James E.

Superintendent of Young Street Street Superintendent Superintendent Superintendent Superintendent Street Street Superintendent Each, \$1700.

Each, \$1700.
Sergeants of Police—A. H. Bachman, A. H. Britton, Wm. Thompson, Ben High, Eugene Sullivan, G. H. Thomas, Wm. Nolan, James Purdue, George H. Thompson, Joseph F. Krug, John Martin, E. F. Culver. Each, \$1000.
Attorney—Charles M. Swift. \$1000.
Surgeon—Dr. J. B. Book. \$1000.

BOARD OF FIRE COMMISSIONERS. Marshall H. Godfrey, Bruce Goodfellow. Oren Scotten, F. Moran. President—Bruce Goodfellow.

President—Bruce Googlenow.
Vice-President—M. H. Godfrey.
Secretary—James E. Tryon. \$2200.
Chief Engineer—James Battle. \$2500.
Assistant Chief Engineer and Supply Agent
James R. Elliott. \$1800.

District Engineers—John Kendall, James C. Broderick. \$1200. Sup't of Telegraph—John McDuff. \$1500. Fire Marshal—Wm. H. Baxter. \$1800. Department Surgeon-B. P. Brodie, M. D. **\$**1800.

Veterinary Sugeon—R. Jennings, V. S. \$350.

BOARD OF WATER COMMISSIONERS. Samuel G. Caskey, John Pridgeon, sr., H. M. Duffleld, August Goebel, one vacancy by death of Joseph Nagel.
President—Col. Henry M. Duffield.

Vice-President-

Secretary—Maj. L. N. Case. \$2400. Sup't of Construction and Extension—Henry

Sup't of Construction and Excension—Troms Bridge, \$2400.
Sup't of Meters and Inspection—Thomas R. Putnam. \$1900.
Sup't of Grounds—E. A. Scribner. \$900.
Chief Engineer—John E. Edwards. \$2200.

Assistant Engineer—Uriah Gould. \$1200. BOARD OF EDUCATION.

President — William Adair.
President — William Adair.
President pro tem—Thos. F. Comerford.
Secretary—Jno. R. King. \$2500.
Treasurer—John S. Schmittdiel.
Sup't of Schools—Wm. E. Robinson.
Supervisor of Property—R. Wallace.

Members. [The terms of the first eight expire June 30, 1891; of the others, June 30, 1893.] 1st Ward-Henry A. Chaney.

2d—willard M. Lillibridge. 3d—Frederick W. F. Brede. 4th—Mrs. S. C. O. Parsons. 5th—Wm. G. Springer. 6th—Thomas F. Halloran. 7th—John B. Todenbier.

8th—Thomas F. Comerford. 9th—William Voigt, jr.

9th — William Volgt, Jr. 10th — Johnston Stuart. 11th — Frank X. Lingemann. 12th — David Ferguson. 13th — Thomas Berry. 14th — Dr. B. R. Hoyt. 15th — William Adair. 16th — James F. Ratigan.

#### PUBLIC LIBRARY COMMISSIONERS.

George S. Hosmer, Magnus Butzel, Henry A. Harmon, R. S. Willis, Edwin F. Conely, Wm. Adair ex officio.
President—George Hosmer.
Vice-President—Magnus Butzel.
Secretary—Herbert Bowen.

Treasurer ex officio—John S. Schmittdiel. Librarian—Wm. Utley.

#### BOARD OF HEALTH.

Drs. Peter Klein, C. C. Miller, and E. A. Chapoton, the Mayor, Controller, and President of Police Commissioners. Health Officer-Sam'l P. Duffield, M. D.

\$3000.

City Physicians—Drs. Thos. Kenning, Wm. M. Harvey, W. R. Murdie. \$1500. Milk Inspector—Charles B. Andrews. \$900. Disinfector—Waldo R. Clark. \$900. Clerks—A. F. Schulte, Dr. Wm. Lockhart. \$1400 and \$1034.

#### BOARD OF ASSESSORS.

John J. Perren, Wm. T. Dust, one vacancy by death of Joseph Nagel. Auditor-elect. \$2500. Assistants—John C. Kinsel, John Haire, Hugh McClellan. \$1500. Chief Clerk-Michael Halloran. \$2000.

BOARD OF POOR COMMISSIONERS. Siegmund Simon, W. K. Muir, Joseph B. Moore, George Lane. President—S. Simon

Vice-President—W. K. Muir. Secretary—P. H. Dwyer. \$1200. Superintendent—J. T. Martin. \$1500. Investigator-John Kolb.

COMMISSIONERS OF PARKS AND BOULEVARD.

George H. Russel, John Erhardt, Wm. Livingstone, jr., Wm. K. Parcher. President—George H. Russel. Vice-President—Wm. Livingstone, jr. Secretary—John R. Stirling. \$2000. Superintendent—Wm. Ferguson. \$2000.

INSPECTORS OF HOUSE OF CORRECTION. Jeremiah Dwyer, Chairman; Wm. J. Chittenden, Merrill B. Mills, F. W. Lichtenberg. Superintendent—Joseph Nicholson. \$3000. Physician—Augustus Kaiser, M. D. \$600.

#### JUDICIAL

Recorder's Court. Judge—George S. Swift. \$4000. Assistant Judge—Fitzwilliam H. Chambers. \$3000.

Clerk—George H. Lesher. \$1800. Deputy Clerk—Charles R. Bagg. \$1800. Stenographer—Wm. W. O'Brien. \$2000.

Police Courts. Police Justices-Edmund Haug, Patrick J. Sheahan. \$3000.

Clerk-Sam'l D. Craig. \$1800.

Justices' Court. Justices-Walter Ross, John Patton, Overton L. Kinney, James Phelan. \$2000.

Clerk-Wm. F. Baker. \$1500.

Thomas W. Fitzsimmons was elected Justice in November, 1890, and will succeed Walter

Ross July 4, 1891. Judges of the Circuit Court—George S. Hosmer, Cornelius J. Reilly, Henry N. Brevoort, George Gartner. Salaries, \$6000.

Judge of Probate—Edgar O. Durfee. \$4000.
Auditors—Geo. C. Lawrence, Jas. Holihan, one vacancy caused by death of Joseph Nagel,

one vacancy caused by death of Joseph Nagel, Auditor-elect, claimed by Chas. P. Collins, previously Auditor. \$8500.

Sheriff—James Hanley. Fees.
Clerk—William May. \$8500.

Treasurer—George C. Huebner. \$5000.

Register of Deeds—John A. Heames. \$3500.

Prosecuting Attorney—Samuel W. Burroughs. \$3500.

Surveyor—Thomas Campau. Fees.

Surveyor-Thomas Campau. Fees.

Circuit Court Commissioners—John C. Considine, jr., Lewis C. Watson. Fees. Coroners—James Downs, James R. Keefe.

\$1200.

Drain Commissioner—J. A. Steevens, Fees. Superintendents of the Poor—Albert H. Raynor<sup>4</sup>, Alvin Seaman<sup>\*</sup>, Joseph B. Moore, Signund Simon, W. K. Muir, Theo. E. Deming\*.
\*600; others unsalaried.

#### BOARD OF SUPERVISORS.

Chairman-John C. Jacobs.

Clerk—Wm. May.

Members—Detroit, the Aldermen and Chairman of the Board of Assessors; Brownstown, J. P. Reed, Brownstown; Canton, Orlando R. Pattengill, Plymouth; Dearborn, Wm. M. Holton, Dearborn; Ecorse, Thos. Sanders, Ecorse; Greenfield, Timothy Kelly, Highland Park; Grosse Pointe, David Trombly, Grosse Pointe; Hamtramck, Roger Echlin, Maybury; Huron, Jesse Butler, Belden; Livonia, Albert T. Radcliffe, Stark; Monguagon, Louis Groh, Neuton; Nankin, Charles H. Cady, Wayne; Plymouth, Lewis C. Hough, Plymouth; Redford, Eli Mettetal, Greenfield; Romulus, Joseph Boltz, Taylor Center; Springwells, Wm. Meyer, Delray; Sumpter, Wm. A. Atyeo, Martinsville; Taylor, Squire B. Lappeus, Dearborn; Van Buren, Jasper Moore, Romulus; Wyandotte, Chas. G. Chittenden, Denis Sullivan, Wm. Bolton. \$3 a day when on duty. man of the Board of Assessors; Brownstown,

### WAYNE COUNTY ELECTION, NOV., 1890.

#### STATE OFFICERS.

Governor.-Winans, D., 21,524; Turner, R.,

Winans' maj., 5657.

Lieut. Gov.—Strong, D., 21,242; Linton, R., 16,345; Allen, P., 908; McGregor, I., 81. Strong's maj., 4897. Secretary of State.—Soper, D., 21,133; Gard-

ner, R., 16,400; Palmiter, P., 912; Adams, I., 69. Soper's maj., 4733.

State Treasurer. - Braastad, Moore, R., 17,083; Coddington, P., 903; Blackman, I., 57. Braastad's maj., 3899.

Auditor of State.—Stone, D., 21,176; Giddings, R., 16,400; Ives, P., 921; Graham, I., 63.

Stone's maj., 4776.

Stone's maj., 4776.

Commissioner of Land Office.—Shaffer, D., 21,087; Berry, R., 16,546; Peck, P., 921; Treat, I., 65. Shaffer's maj., 4541.

Attorney-General. Ellis, D., 21,178; Huston, R., 16,470; Adsert, P., 916. Ellis's maj., 4708.

Superintendent of Public Instruction.—Fitch, D., 21,160; Schurtz, R., 16,467; Howell, P., 924; Littler, I., 64. Fitch's maj., 4698.

Member State Board of Education.—Hammond, D., 20,177; Ballou, R., 16,455; Scott, P., 921; Powers, I., 68. Hammond's maj., 4721.

Justice of Supreme Court.—McGrath, D.,

21,782; Cahill, R., 15,824; Cheever, P., 929; Atkinson, I., 61. McGrath's maj., 5958. Constitutional Convention. — For, 874;

against, 1316. Maj. against, 442.

CONGRESSMAN

Chipman, D., 21,791; Baker, R., 15,861; Pitkin, P., 857; Thornton, I., 49. Chipman's plurality,

#### STATE SENATORS.

First District, Smith, D., 6644; Hopper, R., 4659: Grece, P., 90. Smith's plurality, 1985. Second, Weiss, R., 6804; Wheaton, D., 5992; Briggs, P., 280. Weiss's plurality, 872. Third, Park, D., 7248; Willard, R., 6144; Felt, P., 310. Park's plurality, 1104.

#### REPRESENTATIVES.

First District. — Unofficial returns gave the vote as follows: Miner, D., 17, 405; Jackson, D., 16,949; Henze, D., 16,468; Fildew, D., 15,951; Herz, D., 15,901; Nolan, D., 16,734; Marion, D., 15,830; Fairbairn, R., 19,830; McKinlay, R., 19,464; Davock, R., 17,162; Ellis, R., 17,155. The Republican candidates were voted for under the law of 1880 which ellows annulative. under the law of 1889, which allows cumulative voting; and by these returns only the three Democrats first named, with the four Republicans, were elected. But the County Board of Canvassers, assuming the unconstitutionality Canvassers, assuming the unconstantationary of the law, adopted a report of votes as follow: Miner, 17,216; Jackson, 16,217; Henze, 16,487; Nolan, 16,688; Herz, 16,387; Fildew, 16,170; Marion, 16,004; Fairbaira, 12,508; Ellis, 12,238; Davock, 12,185; McKinlay, 11,517,—and declared the seven Democrats elected. The Supreme Court has since held the law to be invalid, and

Court has since held the law to be invalid, and the seven will take their seats.

Second, Wendell, D.. 1378; Durfee, R., 1075; Earing, P., 148. Wendell's plurality, 303. Third, Holton, D., 1077; McDonald, R., 926; Lathers, P., 89. Holton's plurality, 151.

Fourth, McCloy, D., 1738; Vreeland, R., 1603; Melter, P., 117. McCloy's plurality, 45. The vote for the county officers, was as follows: Sheriff, Hanley, D., 18, 980; Collins, R., 18, 638. For Clerk, May D., 21, 631; Austin, R., 15, 342. Treasurer, Huebner, D., 20, 821; Bleser, R., 16, 621.

R., 16,621. Register of Deeds—Heames, D., 19,650; Bolger, R., 17,936. Heames's majority, 1714. Auditor—Nagel, D., 19,612; Stoll, R., 17,529; Nagel's maj., 2,83.

Nagei's maj., 2.783.

Prosecuting Attorney—Burroughs, D., 20, 287; Wilcox, R., 17,362; Burroughs's maj., 2875.
Circuit Court Commissioners—Watsou, D., 21,250; Considine, D., 21,015, Greenstine, R., 16,542; Bacon, R., 16,157. Watson's maj., 4706; Considine's maj., 4858.

Surveyor—Campau, D., 21,060; Goodell, R., 16,129; Campan's maj. 4831.

16,129; Campau's maj., 4931. Coroners—Keefe, D., 21,233; Downs, D., 19,-685; Brown, R., 17,756; Gutekunst, R., 16,543. Keefe's maj., 3477; Downs's, maj., 3083.

# CITY ELECTION.

#### ALDERMEN.

First Ward, Jos. T. Lowry, R., 1856; Ed J. Williams, D., 820; E. C. D. Clark, I., 184, Lowry's maj., 352. Second, Jas. Verner, R., 1233; Jos. A. Marsh, D., 832. Verner's maj., 401.

Second, Jas. Verner, and, 401.

Third, Wm. P. Langley, R., 1099; Frank Katus, D., 959. Langley's maj., 140.

Fourth, Edwin F. Webster, R., 1200; A. Y. Ladue, D., 972. Webster's maj., 228.

Fifth, John C. Jacob, D., 1360; John C. Roemer, R., 840; P. Kramer, jr., 40. Jacob's Jacob's

maj., 516.
Sixth, Jas. Lennane, D., 1332; A. H. Raynor, R., 1081. Lennane's maj., 251.
Seventh, Henry Schehr, R., 950; Henry Goodenau, D., 905. Schehr's maj., 45.

Eighth, Wm. B. Thompson, D., 1165; F. Cronenwett, R., 910. Thompson's maj., 25.

Ninth, Frank Schmidt, D., 1284; Anthony M. Conus, R., 1126. Schmidt's maj., 158. Tenth, A. H. Reynolds, D., 1276; Chas. Appelt, R., 1014; Wm. H. Venn, Ind., 50.

Appelt, R., 1014; WH.
Reynolds' maj., 262.
Eleventh, Michael H. McGuire, 1050; Henry
Boetteher, 855. McGuire's maj., 195.

Adam Hoffman, 985; Bernard

O'Reilley, 532. Hoffman's maj., 453.
Thirteenth, Jacob F. Meier, R., 657; John Kessler, D., 618. Meier's maj., 39.
Fourteenth, Neil Grant, D., 608; Frank Goodman, R., 525. Grant's maj., 83.
Fifteenth, John A. Fisher, D., 575; Thos. P. Corcoran, R., 374; Walter Preston, Ind., 18.
Fisher's maj., 183.
Sixteenth, John McIntyr', D., 618; Chas.
Goldner, sr., R., 461; David Wyle, Ind., 38.
McIntyre's maj., 119. To fill vacancy, John Coll, R., 546; Peter Raths, D., 527. Coll's maj., 19. maj., 19.

JUSTICE OF THE PEACE

Thomas W. Fitzsimmons, D., 16,137; Frank Tyler, R., 14,325. Fitzsimmons' maj., 1812.

CONSTABLES. CONSTABLES.
First Ward, Hiram H. Hunter; 2d, Jas. B. Willcoxson; 3d, Wm. T. Weitz; 4th, Benj. Sparling; 5th, John Grum; 6th, Dennis Donovan; 7th, Wm. H. Guyott; 8th, John D. Robertson; 9th, Jos. F. Bowen; 10th, Dennis Donney; 11th, Chas. Heinviller; 12th, Albert Schneider; 13th, Jos. Genick; 14th, Gustav A. Kurth; 15th, Thee Corby: 18th, Otto Kleinor. Kurth; 15th, Thos. Corby; 16th, Otto Kleinow.

At large, to fill vacancy, Chas. C. Bowen. First Ward, John S. Mulheron: 2d, Jas. B. rirst ward, John S. Mulheron: 2d, Jas. B. McKay; 3d, Adolphus Merritt; 4th. Wm. L. Wild; 5th, Louis A. Ruch; 6th, Richard F. Reaume; 7th, Wm. Kooch; 8th, Wm. Viehoff; 9th, John B. Peters; 10th, Chas. P. Hickox: 11th, John J. Raeske; 12th, Jos. Tuchocke: 13th Cac. Galetor; 14th Lavrence Verles: 13th, Geo. Galster; 14th, Lawrence Verdan: 15th, Leo Lenaert; 16th, John Markey.

# THE SPORTING WORLD.

### Athletic Events.

In view of the local and general interest in the Amateur Athletic Union, and for the benefit of the four local Athletic clubs, the records of the more important events are here given.

EVENT.	BEST RECORD.	MADE BY.	DATE.	PLACE.
	American, 9 4-5 sec			
	English, 10 sec			
	American, 12 2-5 sec			
220 yard dash	American, 22 sec	Wendell Baker	June 14, 1888	Boston.
	English, 21 4-5 sec American, 4734 sec	C. G. Wood	June 25, 1887	L ndon.
440 yard r. n	American, 47% sec	Wendell Baker	July 1, 1886	Boston.
10 "n	English, 841/2 sec	H. C. L. Tindan	June 30, 1889	London.
Hair mile run	Americ'n, i m. 551/4 sec	W. C. Donm	June 22, 1889	Travers Island
O !!	English, 1 m. 54 sec	F. J. H. Cross	March 9, 1888	Oxford.
	Amer., 4 min 21 2-5 sec			New York.
m	English, 4 m 18 2-5 sec.	W. G. George	July 29, 1882	London.
Two mile run	Amer., 9 m 38 3-5 sec	E. C. Carter	July 10, 1886	Brooklyn.
	English, 9 m. 17 2-5 sec	w. G. George	April 20, 1884	London.
120 yd. hurdle race over 10 hurdles 3				
	American, 16 sec	F T Duchama	Oat 11 1000	TTTb.tu.mton
it. o m. nigii	American, 10 sec	A. F. Copland	Cont 07 1000	Washington.
		H. L. Williams	Sept. 27, 1090	Montreal.
**	English 16 see	II. L. Williams	Nov. 14 1005	0-64
	English, 16 sec	S. Palmer	NOV. 14, 1000	CXIOra.
		C. T. Daft	April 10, 1010	Longon.
		S. Joyce	Turo 9 1000	Cuour
990 vd. hurdle rage	American 951/ coe	T Lee	May 21 1900	Now Vork
Mile well	American, 2514 sec American, 6 293-5 sec.	F P Murray	Oct 97 1989	Mew TOIL.
mine wark	Fngligh 6 2014 can	H Whyett	Mov 2 1984	Dinmingham
Three mile walk	English, 6 3214 sec Amer., 21 m. 9 1-5 sec.	F D Murrov	Nov 8 1889	Now York
imee iime waik	Eng., 21 m. 25 1-5. sec.	C W V Clark	Tuna 90 1587	London
Run'o hioh iumn	American 6 ft. 4 in	W Ryrd Page	Oct. 7 1887	Philadelphia
rean g mgn Jump	American, 6 ft. 4 in English, 6 5t. 31/4 in	W Ryrd Page	Aug. 15 1857	Stourbridge
Run's broad jump	American, 23 ft 31/8 in.	A F Conland	Oct. 11 1890	Washington.
ivan g , , oaa jamp.	Irish, 24 ft 2 in	P Davin	Sent 13 1883	Port Arlington.
Pole Vault	American, 11 ft, 5 in	H H Rayter	Oct. 15, 1887	New York
" ±	English, 11 ft. 7 in	E. L. Stones	June 2, 1888	Southport.
Throwing 56-pound			, 1000	Dour por tr
weight? ft. circle	American 39 ft 10 in	C A J. Truckberner	Oct 11, 1890	Washington.
	English, no record			
Putting 16-lb, shot.	English, no record American, 46 ft. 2 in	George R. Grav	Sept. 20, 1890.	New York.
7,	English, 44 ft. 10 in	J. O'Brien	July 11, 1885	Dublin.
Throwing 16-pound			22, 2000	
hammer from 7				
	American, 133 ft. 8 in.	J. S. Mitchell	Oct. 10, 1889	Elkton, Md.
		P. Lawless		

<sup>\*</sup>L. H. Carey claimed to have run 100 yards in 91/2 seconds. Claim disallowed by A. A. U.

Base Ball.—Series between Louisville and Brooklyn abandoned on a tie. Bad weather.

Brooklyn abandoned on a tie. Bad weather. Bicycling.—American(ordinary).—I mile 2:25 3-5. Windle: \$\frac{3}{4}\) mile, 1:49 2-5. Windle; 5 1-5 miles, 13:51 3-5. Rich; \$\frac{1}{4}\], 35:1-5. Rowe; 3 miles, 8:07 2-5. Rowe. English—\frac{1}{4}\], 33:1-5. Archer; 2 miles, 5:12 1-5. Illston; 4 miles, 11:05 2-5. Os-mond. Safety—1 mile, Jones, English, 2:204-5; Berlo, American, 2:30; 5 miles, 13:19. Lourie. English; 2 miles, 5:22 3-5. Lourie, English; 3 miles, 8:12 4-5. Lourie. English: 4 miles, 10:57. miles, 8:12 4-5, Lourie, English; 4 miles, 10:57 3-5, Lourie.

Tricycling. — One mile, Berlo, American, 2:36; 5 miles, Lourie, English, 13:12; ½ mile, Samson, English, 34 2-5.

Samson, English, 34 2-5.

The Turf.—1-mile trot, Maud S., 2:834; 1-mile pace, Johnston, 2:834; 1-mile pace with running mate, Westmont, 2:134; 1-mile running, Salvator, 1:39 514.

Pedestriantsm.—100 yards, 9 4-5 seconds, H. M. Johnson, Cleveland, July 31, 1886; 220 yards, C. G. Wood, 21 3-5 seconds; 440 yards, W. Baker, 4734 seconds; 880 yards, F. Hewitt, 1:5314; 1 mile, W. G. George, 4:1234; 5 miles, J. White, 24:40; 50 miles, George Cartwright, 5:55:0414; 100 miles, C. Rowell, 18:26:30: 6 days, G. Littlewood, 823 miles: 1 hour, L. Bennett, 11 G. Littlewood, 623 miles; 1 hour, L. Bennett, 11 miles, 970 yards.

Mulking.—1 mile, W. Perkins, 6:23; 5 miles, J. W. Raby, 35:10; 100 miles, A. W. Sinclair, 19:41:50; greatest distance walked without rest, 12 miles, 385 yards, C. A. Harriman; 1 hour, 8 miles 302 yards, John Meagher.

hour, 8 miles 302 yards, John Meagher.
William Speucer, England, walked 5306 miles in 100 days in 1884. He was 64 years old, and walked both out of doors and in halls.
Swimming.—1 mile, Chas. F. Senk (straightaway), 12:4246; 5 miles, C. White, 1:04:23. Capt. Webb kept afloat 60 hours without assistance of any kind.
Skating.—1 mile, Timothy Donoghue 2:12-5; 2 miles, Joseph F. Dougherty, 6:24; 5 miles, J. F. Dougherty, 16:48; 10 miles, F. Dowd, 35:58; 50 miles, S. J. Montgomery, 4:14:36; 100 miles, John Ennis, 11:37:45; 1 hour, Alex. Paulsen, 16 miles 590 yards. Anna Clark Jagerisky skated 30 hours consecutively with but 30 minutes' rest at Detroit in 1868. Paulsen is champion. Paulsen is champion.

Paulsen is champion.

Rowing.—114 miles. Watkins, N. Y., crew (at Detroit), 7:4634; 2 miles, (with turn), C. Courtney and F. E. Yates, 12:16; 3 miles, four oars (straightaway), Argonauta crew, 15:3714; eight oars, Cornell U. B. C., 17:3414; single scull, Jake Gaudaur, 19:54; 5 miles, Harlem River crew, 30:4434; single scull, Edward Hanlan, 33:5614; 10 miles, Joshua Ward, 1:23; 50 miles, C. A. Bernard, 8:55:20. W. O'Connor, champion of America; John McLean, champion of the world.

pion of the world.

The famous America's cup was won in 1851 by the yacht America over the Aurora, off Cowes. It has since been won by English yachts 13 times, Scotch boats have won it 7 times, and United States yachts have been victors 32 times in races for this trophy.

Yale College has won the inter-collegiate races 11 times and Harvard 10, Yale winning

the races of the last six years.

the races of the last six years.

Jumping.—Running long jump (with weights), John Howard, 29 ft. 7 in.; standing long jump (with weights), G. W. Hamilton, 14 ft. 5½ in.; (without weights), H. M. Johnson, 10 ft. 10½ in.; running high jump, W. B. Page, 6 ft. 4 in.; standing high jump, T. F. Kearney, 5 ft. 5½ in.; pole vault, T. Ray, height, 11 ft. 65½ in.; horse, Chandler, 37 feet in lon.; jump; horse, high jump, 6 ft. 11¾ inches.

Glass-ball Shooting.—Capt. A. H. Bogardus, 5500 glass balls broken, out of 5854 thrown from trap. W. F. Carter hit 60,016 objects, out of a possible 64,881.

Fast Time.—Locomotive on Pennsylvania

railroad, 1 mile in 50¼ seconds; steamer City of New York, from Roche's Point, England, to Sandy Hook Bar, 6 days and a trifle over 3 hours; sailing vessel, Liverpool to N. Y., Dreadnaugh, 12 days 5 hours 25 minutes; 28 miles in I hour by the steamer South America on the Hudsen river; Yacht Volunteer cham-pion, and holds the America cup; yacht Puritan sailed 38 miles in 3:32:37.

Pugilism.—Heavy-weight, John L. Sullivan; middle-weight, Jack Dempsey; light-weight, Jack McAuliffe; feather-weight, Ike Weir.

Boxing weights: Feather weight, 116 to 126 pounds; light weight, under 140 pounds; middle-weight, 140 to 158 pounds; heavy-weight,

over 158 pounds.

over 158 pounds.
Sullivan and Kilrain fought in Richburg.
Miss., July 8, 1889, for \$20,000. The largest
prize in any previous battle was the \$10,000
prize fought for by Yankee Sullivan and Tom
Hyer in 1859. The longest battle fought was
between John Smith and James Kelly, in
Austrialia in 1865. Time, 6 hours 15 minutes.
Billiards.—Jarob Schafer holds the record

Billiards.-Jacob Schaefer holds the record for the biggest run, the record for the best run

in the 15-inch balk-line game.

Tennis Player.—Thos. Pettit. Miscellaneous.—Yale College holds the foot-Patch was the first champion, and Steve Brodie is the present holder of the champion-ship. Dr. Tanner's fasting rec rd of 42 days has not been broken, is disputed by Succi with

his 45 days.

Wrestling Champions.—Catch-as-catch-can and Lancashire, Tom Connors; Græco-Roman, Wm. Muldoon; square-hold collar-and-elbow),

John McMahon.

Following is a list of the fastest trotters and

pacers:

pacers:
TROTTERS.—Maud S. 2:8¾: Jay-Eye-See,
2:10; Sunol, 2:10½; Gdy, 2:10¾; bt. Julien,
2:11¼; Axtell, 2: 2; Belle Hamil, 2:12¾; Maxy-Cobb. 2:13¼; Harry Wilkes, 2:13¾; Belnny
McGregor, 2:13½; Phallas, 2:13¾; Palo Alto,
1:12¼; Sunol, 2:10½; Clingstone. 2:14; Goldsmith Maid, 2:14; Nelson, 2:10¾; Stambone,
2:11; Margaret S., 2:12; Jack, 2:12; Hameslake.
2:14: Nany Hanks, 2:14¼.

2:11; Margaret S., 2:12; Jack, 2:13; Hamesiake, 2:14; Nancy Hanks, 2:144; Gold Leaf, 2:114; Little Brown Jug. 2:1134; Sleepy Tom. 2:124; Buffalo Girl, 2:1345; Kichball, 2,1246; Brown Hall, 2:1256; Roy Wilkes, 2:1234; Mattie Hunter, 2:1234; Hal Pointer, 2:034; Arrow, 2;1334; Bessemer, 2:1346; Gossip, jr., 2:1334; Budd Doble, 2:1336; Cricket, 2:10; Roy Wilkes, 2:0734; Adonis, 2:1146; Dallas, 2:1146; B. B., 2:1344.

	ist.	HORSE.	Time.
Ļ	4m	.Jim Miller	211/6
3,	βm	.Cyclone	0:3416
į,	6m	.Geraldine	0:46
•	~ (	Britannie	
5	ám	Fordham	0:59
•	<u> </u>	Sallie McClelland	
3	ám	.Fides	1:101/4
•	- ,	Dullanus I.	. oo á 7
"	$\mathbf{sm} \cdots \gamma$	Bella B. (straight course).	1:2316
	(	Salvator (straight course)	1:3516
1	m	Rosine (straight course)	1:3916
11,	m	.Teuton	1:5234
		Malmatan	0.05
17	4m	Bouquet (straight)	2:0334
14	6m	. Firenzi	2:33
15	ξm	. Hindoocraft	2:48
13	am	.Glidelia	3:01
		.Emgra	3:20
2	m	Ten Broeck (against time) Wildmoor	3:28
3	m	Drake Carter	5:24
•		Ton Duonale (against time)	
4	m	Fellowcraft	7:1916
	,		/*

## LACTO-PREPARATA.

#### A PREPARED HUMAN MILK.

Made wholly from cow's milk with the constituents arranged so as to

closely correspond with human milk.

LÅCTO-PREPARATA we believe is the nearest approach to human milk that can be prepared and remain permanent; and we are confident that it meets every objection to the artificial feeding of infants deprived of breast milk. It is designed more especially for infants from birth to six or eight months of age.

PUT UP IN HALF AND ONE POUND PACKAGES.



THIS BABY USED LACTO-PREPARATA.

## CARNRICK'S SOLUBLE FOOD.

The analysis of this preparation will show that its chemical constituents

are almost identical with an average sample of human milk.

Formula for Carnrick's Food.—SOLUBLE FOOD, as now prepared, is composed of  $37\frac{1}{2}$  per cent. of solid constituents of cow's milk (the casein of the milk being partially digested),  $37\frac{1}{2}$  per cent. of wheat (the starch being converted into soluble starch and dextrine) and 25 per cent. additional milk sugar.

There is no other food for infants or children in the market that so closely resembles human milk in the proportion of its constituents excepting Lacto-Preparata.

It is put up in hermetically sealed cans, and being sterilized will keep indefinitely, and reach the hands of the nurse or mother free from every contamination.

"In my opinion 'CARNRICK'S SOLUBLE FOOD' is much better for nourishing children than any other Infant's Food which I have analyzed."

DR. A. STUTZER,

Director of the Chemical Test Laboratory and the Food Testing Office of Rhenish Prussia.

VELVET SKIN SOAP.—The purest soap made.

VELVET SKIN POWDER.—Superior to all others.

# \*BOLTON

EXTENSIVELY USED FOR WARMING BETTER CLASS OF RESIDENCES WATER IN DETROIT AND THROUGHOUT THE STATE. HEATER.

# HOT-



Residence of HON, JAS, McMILLAN, U. S. Senator, Grosse Pointe, Mich.

#### HEATED BY BOLTON HEATER.

#### REPRESENTATIVE DETROIT AND MICHIGAN USERS:

HENRY B. LEDYARD, Detroit, S. T. DOUGLAS. Fr. J. M. DANGELZER. JULIUS STROH. HIRAM WALKER, DAVID CARTER. MRS. J. S. NEWBERRY.

C. H. HACKLEY, Muskegon, C. C. HOPKINS, Lansing, THOMPSON SMITH, Cheboygan. SELWYN EDDY, Bay City, WM. P. SPAULDING, Sault Ste. Marie. W. H. POTTER, Alpena. C. V. GANSON, Grand Rapids.

AND HUNDREDS OF OTHERS.

ETROIT
HEATING AND LIGHTING COMPANY,

#### 500 WIGHT STREET, DETROIT.

CHICAGO: 88 LAKE STREET. ST. LOUIS: 508 N. FOURTH STREET BOSTON: 42 PEARL STREET. NEW ORLEANS: 28 UNION ST.



H. S. PINGREE, MAYOR OF DETROIT .-- 1890-91.

SENIOR MEMBER

#### SHOE MANUFACTURING HOUSE OF

## PINGREE & SMITH,

ESTABLISHED 1866.

H. S. PINGREE.

F. C. PINGREE.

J. B. HOWARTH.



### Discussing Natural Gas.

Mrs Astorbilt (admiring the dazzling whiteness of the draperies and furnishings all around her,) "My dear Mrs Van Rocker how do you manage to maintain such immaculate cleanliness in your house. It is positively frightful how soon one's hands and clothes become soiled by that horrid coal. I am dying to know the secret."

Mrs. Van Rocker (in surprise) "Is it possible that you do not use **Natural Gas?** By all means have it put in at once. It's just too lovely for anything. Not a particle of dirt of any kind, and so easily controlled, you know." And Mrs. V. simply voices the sentiments of hundreds of happy housewives who are burning the gas.

It is positively perfection as a fuel. It is Cheap, Clean, Safe and Reliable. 2500 Consumers in Detroit, unite in certifying as to its desirability. It replaces coal in every department of domestic use, without any of its attendant annoyances.

For particulars enquire of any of our customers, or at our business office,

#### The Michigan Gas Co.

TELEPHONE 2205.

33 & 35 West Fort St.

## GAINES' DANCING

\* \* \* ACADEMY, \* \* \*

#### 207 Woodward Avenue,

BRANCH, 731 THIRD AVE.

: Advanced Class. : Monday evenings. :
Gentlemen's Class. : Tuesday evenings. :

Ladies' Class, : Children's Class,

Monday afternoons. : : | Friday evenings. : : |

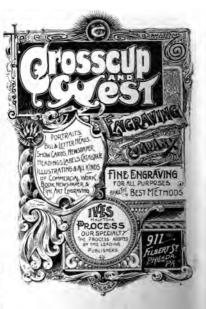
Saturday afternoons. : |

Saturday evenings. : :

PRIVATE LESSONS \* \* \*

\* \* BY APPOINTMENT.

TELEPHONE 1102.





#### SWAN & CO., 89 WOODWARD AVE., DETROIT.

# CAFE

89 Woodward Ave.

The Restaurant "par excellence" of the city.

Ladies take elevator for the dining room.

Service unsurpased and all seasonable delicacies prepared by our experienced what

Admirable accommodation for bareques and private entertainments.

Visitors to the 20 may make their less quarters here was attisfaction to themselves and will recommon special attention



-



CYPROPIDIUM ARNOLDIANUM.
(A NEW ORCHID.)

## JOHN BREITMEYER & SONS,

## Floral Artists.

POPULAR FLOWERS IN THEIR SEASON. : : : : : : :

ROSES A SPECIALTY.

COR. GRATIOT AND MIAMI, DETROIT, MICH.

: : : : TELEPHONE 320. : : : :

## STATE SAVINGS BANK.

G. H. RUSSEL, PRES'T. . M. S. SMITH, VICE-PRES'T. . R. S. MASON, CASHIER.



Cash Capital, \$200,000.

Hammond Building, Cor. Griswold and Fort Sts.

SAVINGS AND COMMERCIAL DEPART- Certificates of Deposit Issued Bear-MENTS. ing Interest from Date.

#### →>DIRECTORS: ✓~

R. A. ALGER,
J. K. BURNHAM,
W. C. COLBURN,
C. L. FREER,
FRANK J. HECKER,
H. B. LEDYARD,
HUGH McMILLAN
W. C. McMILLAN,
R. S. MASON,
H. C. PARKE,
GEO. H. RUSSEL,
HENRY RUSSEL,
M. S. SMITH,
H. M. CAMPBELL.
CHAS. STINCHFIELD.

ATTORNEYS, - - - - WALKER & WALKER.

## H·S·Robinson and Company.



WAREHOUSE AND OFFICES, 99-105 JEFFERSON AVENUE.

MICHIGAN AGENTS OF THE CELEBRATED

### CANDEE RUBBER.

THE CANDEE RUBBER COMPANY MANUFACTURE.

ONLY FIRST QUALITY GOODS.

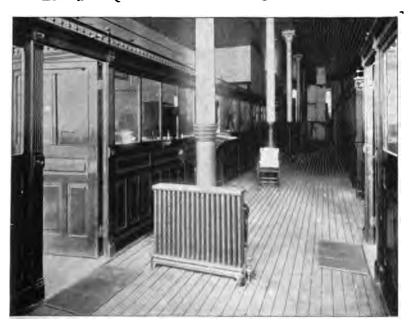
Buy, Sell or Wear no Others! LOOK FOR "CANDEE" STAMP ON THE BOTTOM OF EVERY ONE. THIS IS A GUARANTEE OF QUALITY.

DEMONSTRATE BY THEIR FIT AND DURABILITY THAT THEY ARE THE BEST IN THE WORLD.

ALL ORDERS PROMPTLY ATTENDED TO BY

H. S. ROBINSON & COMPANY, DETROIT, MICH.

## H·S·Robinson and Company.



INTERIOR, SHOWING OFFICES.

Detroit has a national reputation for the manufacture of shoes, and to no firm more than to H. S. Robinson and Company is that reputation due.

This firm, formerly well known as H. S. Robinson and Burtenshaw, built up an immense business at their old place, 65-69 Jefferson Avenue, and since moving into their new handsome quarters, 99-105 Jefferson, have seen it so largely increased that last summer they added a large factory (cor. 5th and Congress) to their facilities.

The Jefferson Avenue stores are occupied for ware-rooms, offices and salesrooms as follows:

Basement—Storage of Rubbers.

First Floor—Salesrooms and General Offices.

Second Floor—Salesrooms.

Third Floor—General Storage of Boots and Shoes, and Sample rooms for Salesmen.

Fourth Floor—Storage of Rubbers. Fifth Floor—General Storage of Boots and Shoes.

This building is roomy and finely lighted and its floors average about 15 feet in hight, but in spite of this it is at some times of the year fairly overflowing with the stock, and the company feel the necessity for still larger quarters.

In their factory, H. S. Robinson and Company are making a specialty of hand-sewed, hand-turned and Goodyear welt shoes, and their work finds a ready sale throughout Michigan, Ohio, Indiana, Illinois, Wisconsin and Minnesota where the bulk of their trade is.

They have also an immense trade in Rubbers, of which they handle all grades.

The accompanying cuts will give a good idea of the Jefferson Avenue building and of its handsome office interior.

## DEALER. VAN HUSAN BROKER.



## REAL

Bought and Sold on Commission.

## ESTATE.

Special Attention given to the Care of Property for Residents and Non-Residents.

Rents Collected.

LIST YOUR PROPERTY WITH US.

Taxes Paid.

--> CORRESPONDENCE SOLICITED ---

SUITE 219,

SECOND FLOOR.

HAMMOND BUILDING.

EXCLUSIVE COMMERCIAL PHOTOGRAPHERS.
ALVORD & CO., 55 ROWLAND ST.



General Viewing. Out door groups, machinery, furniture, stoves, etc. Fine interiors. Developing and printing for amateurs. Kodaks furnished and reloaded. A fine line of City Views.

GROUND FLOOR GALLERY.

TELEPHONE 1594.

#### THE FIRST NATIONAL BANK OF DETROIT.



#### AT THE HEAD OF THE PROCESSION.

The Old First National and Its New

"This building was built for a bank in 1836, and has been occupied by this bank since March 1, 1869," said Mr. Emory Wendell, president of the First National bank, "and the recent change in the internal arrangement of the building was absolutely necessary." The accompanying picture will give an idea of the arrangement of the offices, but to appreciate the beauty and costliness of the remodeled bank something more than a picture or even a description is necessary.

ness of the remodeled bank something more than a picture or even a description is necessary—nothing short of a visit will answer.

Those familiar with the old First National—and what Detroiter is not?—will remember that the offices were at the side away from Griswold st., and did not have the benefit of the light of the windows opposite, for their work. This was inconvenient, as may be supposed, and with various other reasons, decided the directors to make the alterations just completed. The work was done by Wm. Wright & Co., upon plans drawn up ous other reasons, decided the directors to make the alterations just completed. The work was done by Wm. Wright & Co., upon plans drawn up by Mr. Wendell, who acted as his own architect, and results would seem to indicate that the intention not to be outdone had been fully carried

The beautiful marble work, which forms an important feature of the decorations, was done by John Christie & Son, of this city, and furnishes evidence that for first-class work in this line one need not go outside of Detroit.

As now arranged the counter cuts off the Griswold at side of the bank office, giving the tellers and clerks the light of the windows upon their desks. The counter itself, which is surmounted by a super-structure of plate glass and ornaa super-structure of plate glass and orna-

mented ironwork, is of antique oak finish in small panels, and is to pped with mottled red marble. The doors, desks and trimmings of the office are also of oak.

On the opposite side of the room are the book-vaults and the offices of the cashier and collecvauits and the offices of the cashier and collection clerk, while in the corner, at the left hand on entering, is the president's room. These bookvauits, by the way, were the occasion of a good deal of perplexity, since to uncover them by removing the offices across the way was to mar the handsome effect of the whole room, but Mr. Wendell hit upon an ingenious solution of the problem by concealing them behind a paneled oak wainscoting wherein the doors fit so tightly that their presence would be unsuspected by the ordinary observer.

They open, however, readily enough to the in-itiated and disclose iron-bound rooms, where books, papers and other valuables are securely deposited.

Crossing the white marble floor to the back of one comes to the directors' rooms on the Griswold st. side and on the other rooms for the Griswold st. side and on the other rooms for the employes, viz: A tollet room, one in which each has a private locker, and one which will be finished off into a lunch room for them. This in brief for a mere general survey of the offices; space for bids a more detailed description, nor would it be even desirable when a personal visit is so easily made, and will so amply repay the visitor. Suffect it to say that from the frescoed celling to the polished marble floor, from the familiar Doric columns guarding the enviance to the directors' room at the rear, one can find nothing which is not characterized by elegance, convenience and the perfect harmony of good taste so essential to a symmetrical whole.—Detroit Journal, July 12, 1890. the office, and through a door into a back hall, one comes to the directors' rooms on the Griswold

#### THE

## FINE FOOT WEAR HOUSE

146 WOODWARD AVE., DETROIT.

This house deals exclusively in the finer grades of

## GENTLEMEN'S, LADIES' AND CHILDREN'S

## SHOES.

We employ an experienced, skillful, cautious buyer, who exercises the utmost care and judgment in the selection of stock, and we deal only with manufacturers of the highest reputation.

We name as well known manufacturing houses, whose goods can be purchased in Detroit, only at our store, the following:—

Wright & Peters, James Boyd & Son,

L. Boyden & Co., H. H. Gray's Son,

D. Armstrong & Co.,

Geo. W. Ludlow & Co.,

A. E. Nettleton & Co.,

The Wisner Shoe Co.,

Geo. W. Herrick & Co.,

F. A. Barber & Co.,

Laird, Schober & Mitchell.

We buy from other first class houses who excel in special lines of manufacture, and place on our shelves shoes which as to quality, workmanship, style, and general finish cannot be excelled in the world, will give satisfaction to the purchaser and the maximum value for the price paid.



LABORATORY OF PARKE, DAVIS & CO.

The firm of Parke, Davis & Co., under its present name, was organized as a co partnership November 16th, 1871.

Prior to this it had existed under two firm titles, since 1867 as Duffield, Parke & Co., and Parke, Jennings & Co. In 1873 it moved to its present location, and occupied but a small portion of its present site.

It has progressed steadily, until its laboratories, offices, etc., now occupy two whole squares, bounded by Joseph Campau Avenue, Wight Street, McDougal Avenue and Atwater Street, covering a territory of something over four acres. Upon this they have over five acres of floor space, where the business of the firm is transacted. Its present capital stock is \$1,000,000.00. It gives occupation to 695 employees.

The manufacturing is almost all done at Detroit. For the distribution of their products, branch offices have been established at New York City, Kansas City, and London, England, also, in Walkerville, Ont., they have established a branch laboratory with a river frontage of 140 feet and a depth of 279 feet,

All their laboratories are equipped with the most efficient and recently produced apparatus for the manufacture of the various products in which they are interested, and every aid and facility both in machinery and in skillful employees, is generously furnished to assist in producing the best and most finished pharmaceutical preparations of their several kinds, the quality and finish of their products being always the first consideration.

Founded upon these principles, the firm has advanced from year to year in magnitude and in reputation, until its preparations have become synonyms for purity and reliability.

The above view of the laboratory of Parke, Davis & Company, of this city, is presented through the courtesy of that house. We would state however that it is not the policy of this concern, which depends for its patronage entirely upon the confidence and cooperation of the medical profession, to advertise in any form to the public. The JOURNAL however feels that a list of the important institutions of Detroit would be incomplete without a view of the above laboratory, and therefore takes it upon itself to include the same in the list.



## A Believer PROTECTION



## FLORAL \*\* WORK

OF EVERY DESCRIPTION, EXECUTED ON THE SHORTEST NOTICE.

#### JAMES VERNOR.

235 Woodward Avenue, DETROIT.

YOU are well Protected if you never forget

To use the P.ophylactic Tooth Brush (a protection against disease), carefully note directions found with every brush.

Those who have the whitest teeth use the Prophylactic Tooth Brush. When buying a tooth brush be sure to ask for the

PROPHYLACTIC. + +



# THE YEAR BOOK PRINTED AND BOUND BY The Richmond & Backus Co.

183 Jefferson Ave., DETROIT, Mich.

Wholesale and Retail

## Stationers, Blank Book Manufacturers, BINDERS and PRINTERS.

Bank and Office Outfitters,

Law and Corporation Blanks

Seals, Stock Certificates, Blank Books, Etc.

AGENTS FOR THE

## 'Mimeograph,' 'Hektograph' and 'Cyclostyle'

For Duplicating Writing.

Card Plate Engraving and Printing, Monogram Cutting and Die Sinking, Wedding Cards and Notices.

Railroad, County and Bank Supplies our Specialty.

Agents for THE CALIGRAPH TYPEWRITER, (Send for Catalogue.)



(One of the Windows of Walter Buhl & Co.)

## WALTER BUHL & CO., 146 & 148 JEFFERSON AVENUE.

Manufacturers of SEAL and other FUR GOODS. WHOLESALE AND RETAIL DEALERS.

## Eastlake Metal Shingles

ROOFING.



Acknowledged by architects and builders to be the best, most durable and handsomest roofing on the market.

Manufactured by

W. J. BURTON & CO'S
GALYANIZED IRON CORNICE WORKS
COR. STATE AND PARK.

DETROIT. - MICH.

HUBBARD & DINGWALL,

REAL ESTATE,

Office, 114 Griswold St.

DETROIT,

MICH.

W. H. SWAIL
JOB PRINTER.

28 West Congress St., Detroit.

COMMERCIAL WORK A SPECIALTY.

WEDDING AND PARTY INVITATIONS, PROGRAMMES,

CALLING CARDS, ETC. NEATLY PRINTED.



SUPERIOR NCRAVINCS

ENGRAVINGS

PORTRAITS, BUILDINGS. MACHINERY.

VIEWS, Maps.

PLATS, ETC.

ESTIMATES AND SAM-PLES CHEERFULLY ' FURNISHED.

A. ZEESE & CO. 341-351 Dearborn St.

CHICAGO, ILL.

To Buy, Sell or Rent

## THE HANNAN

Real Estate Exchange,

153 GRISWOLD ST. & COR. LAFAYETTE AVE.

Opposite City Hall.

## Merchandise, Furniture, Etc.

SECURITY STORAGE CO

Rear 181—183—185 John R. Street. TELEPHONES 815 and 1621-3 Rings.

DETROIT BRANCHES.

VAIL-CRANE. DEPEW. COPLAND. MORTON.

#### UNITED STATES BAKING CO.,

≥ FINE ≥

## BISCUITS, : CRACKERS, : BREAD.

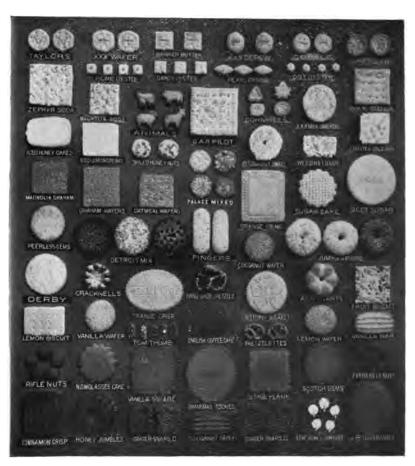
SELF RAISING FLOUR.

Main 48 to 56 East Woodbridge St.

BUTTER

TAYLOR V. WAFER.

BANNER. HOME.



The above cuts represent only a part of the extensive line manufactured by us. SOLD BY ALL GROCERS.

Packed in bbls. and boxes, and fancy tins for family use.

DETROIT, MICH.

U. S. BAKING CO.



# EVEREIT PIANO.

UNEXCELLED IN

Every Quality Requisite in a

## FIRST-CLASS PIANO.

THE JOHN CHURCH CO.,

CINCINNATI.

<sup>&</sup>quot;From Andante to Allegro," a beautifully illustrated pamphlet, will be sent free to any one who will mention where this advertisement was seen.

## Good Gold Given Gratis.

THE 1892 Year Book will be much finer than this edition for 1991 finer than this edition for 1891, and on this page, in the next issue, the Detroit JOURNAL proposes to publish a full page advertisement which will state in the most effective form, at least three good reasons why the people of Detroit and Michigan should take the DETROIT JOURNAL for their daily reading. The Journal will give a \$20 gold piece to the one who will send in, on or before September 1, 1891, the most effectively written advertisement covering these points.

This Competition is limited to those who are regular readers of the Detroit Journal, and who frequently recommend it to their friends.

